



Cibola National Forest Mountain Ranger Districts

Wilderness Character Evaluation Criteria Matrix



AREA ID/NAME:

Mountainair Ranger District, Northeastern Manzano Mountain Areas

D4_ADJ4: T7N R5E, T6N R5E, T5N R5E; 5733.87 acres

Evaluation Interdisciplinary Team Meeting Date: 12/10/15

Interdisciplinary Evaluation Team (IDT): Forest Service personnel: Natalie Heberling (GIS specialist), Jessica Dunn (Forest Plan Revision Recreation, Scenery, and Designated Areas specialist), Ian Fox (Planning Staff Officer), Aaron Johnson (District Forester), Rob Arlowe (GIS specialist), Alan Warren (District Range Specialist), George Long (Acting District Ranger), Amanda Rael (District Biologist), Arlene Perea (District Recreation Specialist), Anthony Martinez (District Fire Specialist), Michael Carpinelli (Forest Plan Revision Vegetation Specialist). Landscape team: Kelly Smith (Edgewood SWCD), Arturo Archuleta (NM Land Grant Council), Paul Lujan (Pueblo of Isleta DNR), Dan Williams (Claunch-Pinto SWCD), Frank Luna (CP SWCD), Juan Sanchez (NMLGG), Marc LeFrancois (NPS), Art Swenka (Edgewood SWCD), Lacy Levine (NMDA), Chuck Schultz (NMDGF), Dierdre Tarr (Claunch-Pinto SWCD), Cheri Lujan (East Torrance SWCD), Steve Guetschow (Torrance County) Facilitator: Kathleen Bond

Forest Plan Revision Steering Committee Review and Decision Date: 1/21/16

Criterion 1- Apparent naturalness: The degree to which an area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities? The purpose of this question is to determine if plant and animal communities appear substantially unnatural.

Considerations for 1a:

- How are concentrations of nonnative plants and/or animals distributed across the land?
 - **Narrative:** There are some populations of cheatgrass bordering the western edge of the area, but the majority is shown to be not within the boundaries of the area itself, and this data is from 1998. Public comment reports that 481.4 acres of cheatgrass occur within the polygon, but these acres are the same data shown geospatially (confirmed by commenter). There is a small amount shown to overlap within the boundaries geospatially. Forest Service specialist reports that the density of the cheatgrass today is visible in trace amounts if at all; no evidence of cheatgrass was observed. Cheatgrass population could expand and contract from year to year but state of population as it exists today within the polygon is not known. Area is part of a large grazing allotment. Data for monitoring that grazing allotment was gathered in 2006. Forest Service range specialist reports that in 2006 area was rigorously looked at for all species; that data showed the cheatgrass population was not recorded, and specialist reports that he was there recently and the population was not evident. Landscape team member reports there are some noxious weeds going up toward Capilla Peak within the burn scar and the draws. Discussion about the effects of this in relationship to the area as a whole. This Capilla Peak area receives a lot of traffic. Landscape team member reports a survey was done by Soil and Water Conservation District showing isolated spots of musk thistle and Canadian thistle on forest boundary outside of polygon. Area is not substantially unnatural across the area as whole; cheatgrass populations occur outside of boundaries and population of noxious weeds is isolated and not substantially unnatural to area as a whole.

- Other (Describe the dominant vegetation types, associations, and plant and animal communities. Include any additional information related to the question above)
 - **Narrative:** Landscape team report elk is present in the area, and appears it is expanding but landscape team member and Forest Service specialist report that it is actually a recovering population expanding into its historical range and distribution that was present prior to European expansion. Observations and discussions about elk in area are relatively recent in the last few years. Geospatial data shows area is mostly dominated by evergreen tree mix and ponderosa pine mix. Perennial water source near 4th of July canyon, where white fir, maples, some cottonwood and willows occur near riparian area. Maple community is very significant and unique for this area; very few of those examples occur in New Mexico. This area contains portions of five grazing allotment with livestock present.

Question 1a Findings

This area receives a **High** finding; animal and plant communities do not appear substantially unnatural. Area is not substantially unnatural across the area as whole; cheatgrass populations occur outside of boundaries and population of noxious weeds is isolated and not substantially unnatural to area as a whole.

Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?

Considerations for 1b:

- Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas
 - **Narrative:** Geospatial data shows that thinning for hazardous fuels has occurred in area, concentrated in the middle of the area. Geospatial data also shows that planting trees has occurred, concentrated in the southern portion of the area, and some broadcast burning has occurred in the southeastern area, along the boundary. The thinning projects were all done in 2003. Planting was done in 2010. Burning was done in 2004. Team discussed whether the treatments are still evident. Forest Service specialist reports that the thinning is fairly evident still and tree planting was mostly unsuccessful, but planting was not unnatural looking in itself. Landscape team member reported the burn scar could appear unnatural to the average user and this burn is significant due to the dead and downed trees. Forest Service specialist said that the burn would be a normal scar through an area within the overall landscape, since it is a natural part of vegetation cycle, and disagrees that burn scar would appear unnatural to average visitor. Forest Service specialist reports that there is a historical occurrence of logging (50 years or older) due to industry history in area and could be part of the average viewer's perception; knowing logging occurred in area it would appear that fire is a natural part of cycle and there is historical perception of logging activities being part of the cultural landscape. In very northern and southern portions there are pre-commercial thins, done in 1986 and probably not evident. Forest Service specialist reports that there have been a few large fires in the area, including Trigo fire, and some have been natural-caused and some human-caused. Trigo fire boundary shows in southern portion. Forest Service specialist reported dense areas of tree and areas with disease. Comment from landscape team about density of trees. Forest Service specialist comments this would not appear unnatural to average visitor, because we cannot say what the area would have appeared as within natural range of variability. In the northern area, there are projects related to the Isleta restoration projects, but the vegetation treatments shown under Forest Service jurisdiction are shown as no treatment due to Mexican Spotted Owl habitat.

- Does the vegetation appear natural (consider elements, including but not limited to vegetation species composition and structure,¹ wildlife, soil, air, etc.)?
 - **Narrative:** Public comment received that the area contains some ancient orchards. Discussion about whether or not these appear unnatural. Discussion about how long the orchards have been there. Forest Service specialist reports that one tree has been seen, outside of the polygon.
- Other:
 - **Narrative:** Discussion about Moderate finding, due to vegetation not appearing natural, concentrated in the southern portion. If the area was split into two different sections, the southern portion would receive a Low due to multiple historic treatments and there was disagreement in the team as to whether the northern portion would receive a High or Moderate, due to the threshold saying “little evidence” in High and saying “isolated or scattered spots” in Moderate (only comment for northern portion was density of trees)

Question 1b Findings

This area receives two findings, based on geography.

The southern portion receives a **Low** finding (below Fourth of July Canyon) due to multiple historic treatments. The northern portion receives a **High** finding (above Fourth of July Canyon), due to vegetation appearing natural in area.

Question 1c. What is the extent to which improvements² included in the area represent a departure from apparent naturalness?

Considerations for 1c:

- Consider the extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole. Consider the presence and concentrations of all improvements listed below:
 - Appearance of airstrips, heliports, and/or landing zones. Include size of area and description of disturbance (soils, vegetation).
 - Appearance and concentration of linear travelways, including maintenance level 1 roads,³ system non-motorized and motorized trails, and known unauthorized routes (includes decommissioned, temporary, and user created). Consider length and spatial distribution (broadly interspersed vs. concentrated).
 - Appearance and concentration of fences and pipelines. Include miles of fencing or pipeline per square mile.
 - Appearance and concentrations of areas of mining activity, including exploration and prospecting, that were not eliminated in the Phase 3 inventory.⁴ Include size of area and description of disturbance (soils, vegetation).
 - Appearance of range or wildlife improvements that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
 - Appearance of watershed treatment areas (such as contouring, diking, channeling) that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).

¹ Species composition is the number and proportion of species present. Structure refers to the size, density, and arrangement of plants.

² The use of the term “improvements” in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole.

³ For a glossary of road terminology, please see the *Cibola National Forest Mountain Ranger Districts Assessment Report, Vol, II*, page 258.

⁴ See Appendix A for Substantially Noticeable criteria used in Phase 3 inventory, and Appendix B for results from the Phase 3 Inventory.

- Appearance and concentration of other improvements (including but not limited to water tanks, aviation crash locations, wreckage sites, locations of cemeteries or gravesites, bombing or ordinance locations, and viewshed analysis for proposed developments)
- Other (Include any additional information related to the question above)
 - **Narrative:** Northern portion: National Forest System Trail (NFST) 47a, one unauthorized trail. Forest Service specialists report that there are unauthorized roads where unauthorized fuelwood gathering has occurred around 4th of July and some around Bosque and Antelope camp (along eastern edge of area, with some coming into the area). These unauthorized routes are also shown in geospatial information. There is one decommissioned route in the very northern portion. Public comment received that there are improvements within the area (taken from geospatial data) that were determined to not be substantially noticeable in inventory---two spring well developments, two range allotment fences along eastern edge of area (one of which crosses area in two places), and two gates on those fences in the upper 4th of July spring and Diablo spring area. 4th of July spring well has not been used for grazing since fire; spring well has gone dry and is very low so has not been livestock used since fire. Maintained by horseback. Diablo spring also maintained by horseback, but not recently maintained or used due to water levels. Both spring well developments are concrete. Public comment that there is evidence of cabins, lean-tos, and old wells, but location was not specified. This comment may be referring to the wells previously discussed. Landscape team member reports that there is some evidence of old homesteads up around 4th of July.
 - Southern portion- Geospatial data shows Upper Aspen spring well development (metal), two system trails, one closed road, and eight unauthorized routes reported in geospatial data. Forest Service specialist reports some communication towers along the boundary near Capilla Peak, and a powerline along the southern boundary edge, but it is underground and outside of the boundary. FS range specialist reports there are two east-west allotment boundary fences in the southern portion. Fences bisect the area completely.

Question 1c Findings

This area receives two findings based on geography:

A **Low** finding (below Fourth of July Canyon), due to obvious evidence of human disturbance; appearance and concentrations of improvements detract from apparent naturalness in most areas.

A **High** finding (above Fourth of July Canyon) due to little or no evidence of human activity.

Criterion 2- Outstanding opportunities for solitude or a primitive and unconfined type of recreation: **the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.**

Note: The word “or” means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.

Question 2a. Consider impacts that are pervasive and influence a visitor’s opportunity for solitude within the evaluated area.

Note: Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area.

Considerations for 2a:

- Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise?
 - **Narrative:** Area is adjacent to existing wilderness all along the western edge, and adjacent to private and land grant lands along the eastern edge. The eastern edge contains roads all along

the border. Motorized noise from use along roads around 4th of July and Capilla Peak may be pervasive around those roads due popularity of recreation there. Northern area contains good screening from roads due to vegetation FR55 loop is well screened so sights of road traffic are not pervasive, but motorized noise may somewhat carry into area. Landscape team member reports that the amount of people along these areas is extensive and affects solitude; Forest Service specialist reports that this may be the case during the fall color viewing season, but not very many people during the other seasons. Forest Service specialist reports that around 4th of July noise is not pervasive, but that noise is very pervasive around Capilla Peak due to lack of vegetative screening and landform screening. Some noise occurs from ATVs and OHV other than cars and trucks and unauthorized chainsaw cutting. In summary, noise is pervasive around Capilla Peak in southern portion of area due to no screening and openness and in different team members report different pervasiveness levels in northern area around 4th of July (fall color viewing and holiday weekends vs every day). The area is all downslope from a crest in the existing wilderness. The entire western edge is adjacent to existing wilderness. Area is not steep but more of a gentle forested slope on eastern side as compared to that rockier steep western side. Some of the user created routes stop when they hit the steeper grades in the west. There is a youth camp as well as some other camps (Sufi camp) outside of the area and this noise occurs inside of area. Light pollution also occurs in the evenings from Albuquerque.

- Public comment that area is contiguous to exiting wilderness and provides opportunities for solitude and primitive recreation, and reports that eastern margin may need some adjustment for buffer zones close to roads and inholdings. Public comment received that areas would add significantly to the existing wilderness, and that during experience hiking in areas throughout the years commenter was never able to tell difference between wilderness and other national forest
- Projects outside but adjacent to area in northeastern area (mechanical treatments—Isleta projects) and possible other projects by other agencies may have an impact as well- Isleta has received noise complaints from these activities. There is Inlow sawmill adjacent to the area on the eastern edge.
- Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area's adjacent, cherry-stemmed roads.⁵
 - **Narrative:** Forest Service Lands specialist: The area is close to private land and may inhibit a visitor's opportunity for solitude within the evaluated area. From Forest Service specialists: recreation developments (three trailheads) are adjacent to the western boundary, as well as 4th of July campground, area is adjacent to existing wilderness all along the western edge, and adjacent to private and land grant lands along the eastern edge. The western edge contains roads all along the border.
- Other (Include any additional information related to the question above).
 - **Narrative:** Team discussed Moderate to Low finding, due to seasonal variability; feeling of being alone is possible and signs of civilization are possible. There was disagreement as to whether it was a Moderate or Low.

Question 2a Findings

This area receives two findings, based on geography:

A **Moderate** finding in the northern portion due to seasonal variability of impacts to solitude.

A **Low** finding in southern portion due to impacts to solitude along eastern edge.

⁵ The term "cherry stemmed" road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase 1 Inventory process.

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.

Note: Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature. This question also relates to miles of fence information from Criterion 1, Question 1c, due to the potential for miles of fence to restrict unconfined recreation opportunities.

Considerations for 2b:

- Describe the types of primitive recreation activities in the area.
 - **Narrative:** Team reports that area is popular for hiking, backpacking, horseback riding, camping, bird-watching, and hunting. Fall color viewing is a popular activity around 4th of July Canyon. Medicinal plant use gathering occurs in the area. Landscape team member comments that trails are crossed in some areas by fences. Forest Service specialist reports that the known activities in the area are primitive types of recreation. The system trails in the area are designated non-mountain biking.
 - Public comment that area is contiguous to existing wilderness and provides opportunities for solitude and primitive recreation, and reports that eastern margin may need some adjustment for buffer zones close to roads and inholdings.
- Describe other types of recreation activities in the area.
 - **Narrative:** Mountain biking may occur but it is not a destination for mountain biking.
- Percent of area with semi-primitive non-motorized recreation opportunity spectrum class.⁶
 - **Narrative:** D4_ADJ4: 40% SPNM ROS Class
- Percent of area with a semi-primitive motorized recreation opportunity spectrum class.
 - **Narrative:** D4_ADJ4: 22% SPM ROS Class
- Other (Include any additional information related to the question above)
 - **Narrative:** The majority of the team finds that this area receives a High finding, due to the known occurrence of many opportunities for engaging in primitive recreation and the popularity of primitive types of recreation in the area and the system trails prohibit mountain biking use.
 - Some of the team finds that this area receives a Moderate finding, due to the possible potential for some opportunities for non-primitive recreation.

Question 2b Findings

Area receives a **High** finding, due to the known occurrence of many opportunities for engaging in primitive recreation and the popularity of primitive types of recreation in the area and the system trails prohibit mountain biking use.

Criterion 3- Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.

⁶ The Forest Service's Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. The ROS Inventory Existing Condition maps have been completed for the Forest, and the existing condition of semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) ROS classes are being used as measures. SPNM ROS settings are areas characterized by a predominantly natural or natural-appearing environment, low interaction between users. Primitive activities occur in this setting, and include the following: viewing scenery, hiking, walking, horseback riding, camping, hunting, nature study, mountain climbing, swimming, fishing, etc. Motorized use is not permitted in SPNM ROS settings. SPM ROS class areas provide the same experience and setting as SPNM, but motorized use occurs in addition to primitive-types of recreation. Primitive ROS classes only exist on the Forest in the ROS Inventory Existing Condition within existing wilderness, so are not being used as a measure. These maps are only existing condition, and are subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Forest Plan Revision. Please refer to the Recreation Opportunity Spectrum Handbook and Primer for more information: http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm

Note: If an area on the Phase 3 Inventory maps is under 5,000 acres, it will be evaluated using the other Criteria 1, 2, 3, and 4. Therefore, there are no separate considerations for Criterion 3.

- **Narrative:** This area is adjacent to existing wilderness, so this criterion does not apply.

Criterion 4- Unique and outstanding qualities: the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Note: These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.

Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?

Note: Rare in this context is defined as local or regional.

Considerations for 4a:

- Presence of threatened, endangered, or rare species (from Natural Heritage database and other data sets as available).
 - **Narrative:** Geospatial data shows that goshawk Post-Fledgling Area (PFA) habitat occurs in the southeastern area. Mexican grey wolf habitat occurs in the area. The Rocky mountain maple stand around Fourth of July Canyon is rare and unique for the state. Public comment received that unusual colony of maple trees in the desert southwest and is biodiverse for Manzano mountains. Large gambel oak individual in same area. None of these species are threatened, endangered, or rare.
- Other (include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4a Findings

This area receives a **Moderate** finding, due to presence of rare or plant and animal communities (Goshawk PFA).

Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?

Considerations for 4b:

- Description of any unique geologic features in the area.
 - **Narrative:** There are caves off FR 245 that were historically significant but they are outside of the area boundaries.
- Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class.⁷
 - **Narrative:** D4_ADJ4: 75% Distinctive Scenic Attractiveness class. Landscape team and Forest Service specialists report that area around 4th of July canyon has a unique scenic stand of rocky mountain

⁷ The Forest Service's Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Forest, with District personnel input on areas of the Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. Refer to the Forest Service Scenery Management Handbook for more information: http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf

maple; quite a bit of this occurs within the area. Landscape team commented that burn scar may detract from scenic attractiveness in southern area. Forest Service specialists report there is an area at top of McKinley private area loop where water falls off of rocks after spring (but this is most likely outside of the area). Landscape team members report that along 4th of July road there are scenic cliffs within the boundaries.

- Public comment received that area has scenic views across eastern plains. Additional public comment that there is a very unusual native colony of maple trees in the desert southwest that deserves special protection for its unique contribution to the biodiversity of Manzano mountains and for its high scenic values and recreation opportunities.
- Other (include any additional information related to the question above):
 - **Narrative:** There are some unique viewpoints within the area.

Question 4b Findings

This area receive a **Moderate** finding, due to presence of some outstanding landscape features (Rocky mountain maple population and scenic areas).

Question 4c. Are there historic and cultural resource sites in the area?

Considerations for 4c:

- Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b.
 - **Narrative:** D4_ADJ4: Forest Service archaeologist reports a finding of Low, percent surveyed 63.8%. Landscape team commented that entire area is essentially an archaeological site. Other landscape team members felt that the area should receive a finding of High based on known sites in area. Medicinal plants and gathering routes and areas are documented and common throughout area. There may be more sites in unsurveyed areas.
- Other (Include any additional information related to the question above)
 - **Narrative:** Based on information that could be shared in the geospatial information, team felt the area deserved a Moderate finding due to presence of several historic and cultural resource sites and possibly more in unsurveyed area (so there is a possibility for it to be High).

Note: (Confidentiality requirements with respect to cultural resource sites must be respected (25 U.S.C 3056)).

Question 4c Findings

Area receives a **High** finding due to presence of several historic and cultural resource sites and routes and possibly more in un-surveyed area.

Question 4d. Are there any research natural areas?

Considerations for 4d:

- Percent of area that is part of a research natural area.
 - **Narrative:** 0%
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment

Question 4d Findings

This area receives a **Low** finding, due to no research natural areas in the area boundaries.

Question 4e. Are there any high quality water resources or important watershed features?

Considerations for 4e:

- Presence and extent of high quality water resources in the area.

- **Narrative:** The entire area is an important watershed. Tajique Creek is one of the few riparian perennial sources in mountain range (north); this riparian area is in the area boundaries. New Canyon is in southern portion and also has riparian area. The Torreon Creek and natural spring feed into an acequia outside of the area boundaries; these may not always be flowing. Area contains water recharge for Estancia basin. There are several springs within the area. Manzano area is part of water catchment for municipal water source.
- Other (Include any additional information related to the question above, including whether the water resource meets state water quality standards)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment

Question 4e Findings

This area receive a **High** finding, due to area having several or many high quality water resources; the area as a whole has extensive watershed features.

Criterion 5- Management: the degree to which the area may be managed to preserve its wilderness characteristics.

Question 5a. Can the area be managed to preserve its wilderness characteristics?

Considerations for 5a:

- Presence and extent of legally established rights or uses within the area. (e.g. active mining claims, grazing allotments, easements, water rights, acequias)
 - **Narrative:** Five grazing allotments occur within the area. Types of range improvements include two range allotment fences along eastern edge of area (one of which crosses area in two places), and two gates on those fences in the upper 4th of July spring and Diablo spring area. 4th of July spring well has not been used for grazing since fire; spring well has gone dry and is very low so has not been livestock used since fire. Maintained by horseback. Diablo spring also maintained by horseback, but not recently maintained or used due to water levels. Both spring well developments are concrete. There may be a need to maintain concrete structure sometime in the future but that is not known.
- Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat).
 - **Narrative:** Mexican wolf release potential in Manzano mountains (10-J experimental release area includes everything south of 1-40 on Forest Service land) but management of wolf release would not affect the ability to manage for wilderness characteristics.
- Presence and extent of non-Federal land and access in the area⁸
 - **Narrative:** Geospatial data shows there are some private inholdings along eastern edge and some are cherry-stemmed into the actual boundaries.
- Describe management of adjacent lands.
 - **Narrative:** Geospatial data shows that the eastern side of area is Forest Service with some private inholdings, and Isleta Pueblo to the north. Western boundary is entirely adjacent to existing wilderness. From Forest Service Lands specialist: The area could be easily managed because of the well-established roads and adjacent parcels of land next to the evaluated area. Private inholdings have active forest and water restoration, improvements, and management activities by the Soil and

⁸⁸ This consideration, in addition to "Describe management of adjacent lands" and "Presence and extent of 'cherry stemmed' roads or other linear features" informs the consideration of shape and configuration as outlined in FSH 1909.12 Chapter 70.

Water Conservation District occurring. There are active restoration treatments north on Isleta pueblo.

- Describe presence and extent of cultural and traditional uses of the area (e.g. shrines, ceremonial use, etc.)
 - **Narrative:** From Forest Service specialists: There is cultural and traditional use. Wilderness management would not conflict with permitted cultural and traditional use. Medicinal plant gathering as well as other cultural uses occur.
- Presence and extent of wildland urban interface in the area. Include acres if possible.
 - **Narrative:** D4_ADJ4: 22% wildland urban interface. Public comment that three distinct wildland urban interface overlap in the area—geospatial data shows some in middle of area and small portions in the southern portions. These are all part of the 22% calculation.
- Describe any other management activities or restrictions within in the area (e.g. upcoming management decisions).
 - **Narrative:** No management activities or restrictions are on the District Schedule of Proposed Action. Partners in area have expressed interest in future access in areas that compliment ongoing restoration on jurisdictions within area. There is presence of a Goshawk PFA in the southeast edge; management for these areas prioritizes restoration, which could have some impact on managing for wilderness character.
- Describe existence and extent of motorized and mechanized uses within the area (trails, routes, special activities).
 - **Narrative:** There is probably some mechanized maintenance occurring along fences due to fallen trees from fire.
- Presence and extent of special use permits and authorizations within the area.
 - **Narrative:** Special use authorization information provided by geospatial information shows that special uses occur outside of the area boundaries.
- Presence and extent of “cherry stemmed”⁹ roads or other linear features.
 - **Narrative:** Five to six cherry-stemmed roads occur along the boundary. Two almost bisect the area. Public comment that eastern margin may need some adjustment for buffer zones for roads and inholdings. There is a powerline outside the southern boundary.
- Other (Include presence of Inventoried Roadless Areas and any additional information related to the question above.)
 - **Narrative:** There is unauthorized firewood cutting and gathering in the northern portion of this area and issue was raised that this is a traditional and cultural use.
 - There are no Inventoried Roadless Areas within the area.
 - Team discussed Moderate finding, due to ability to manage to preserve for wilderness characteristics is possible in most areas. Steering committee discussed numerous incidents reported to law enforcement.

Question 5a Findings

This area receives two findings based on geography:

A **Low** finding (below Fourth of July Canyon), due to inability to manage to preserve for wilderness characteristics in most areas.

A **Moderate** finding (above Fourth of July Canyon) due to management to preserve wilderness characteristics possible in most areas.

⁹ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase I Inventory process.

IDT Findings and Preferred Proposal Discussion (How should this area be managed? Include any suggested alternatives), 12/10/15:

Finding: The team finds that the area as a whole with its current boundaries does not have wilderness character, based on the individual findings and the details within the findings. **Preferred Proposal:** There is consensus from the team that the area south of 4th of July Canyon should be managed for watershed protection and health, forest restoration, traditional and cultural uses, permitted and authorized uses. Watershed health of this area affects areas outside of the area boundaries. The 4th of July Canyon should be managed to protect the scenic values and watershed values, and unique botanical populations in this area. There is not consensus on the team about the northern portion of the area (north of 4th of July Canyon). Some of the team finds that northern portion of the area (north of 4th of July canyon) does contain wilderness character. Areas are more primitive in this area, and issues detracting from wilderness character could be excluded. Some of the team finds that the northern portion should not be managed as wilderness due to the concerns around potential need for watershed restoration, treatment, and protection due to current tree stand densities. **Alternatives:** Public comment was received that 4th of July Canyon should be designated as a “Special Area” due to unusual native colony of maple trees in the desert southwest that deserves special protection for its unique contribution to the biodiversity of the Manzano mountains and for its high scenic values and recreation opportunities. **Issues of Note Discussed:** There is unauthorized firewood cutting and gathering in the northern portion of this area and issue was raised that this is a traditional and cultural use.

Steering Committee Decision, 1/21/16:

Finding:

Area as a whole with its current boundaries does not have wilderness character, based on the individual findings and the details within the findings. The northern portion of the area (north of 4th of July canyon) does contain wilderness character. Areas are more primitive in this area, and issues detracting from wilderness character could be excluded.

Preferred Proposal:

Manage area south of Fourth of July Canyon for watershed protection and health, forest restoration, traditional and cultural uses, permitted and authorized uses. Watershed health of this area affects areas outside of the area boundaries. Manage Fourth of July Canyon and area north of Fourth of July Canyon as a “Special Area” due to unusual native colony of maple trees in the desert southwest that deserves special protection for its unique contribution to the biodiversity of the Manzano mountains and for its high scenic values and recreation opportunities.

Alternative: Manage the area north of Fourth of July Canyon as potential wilderness.

Issue of Note: Research why Fourth of July Canyon area and north area were not included in original wilderness boundary.

Wilderness Evaluation Findings and Summary Table

Area ID:		D4_ADJ4 IDT Findings 12/10/15	D4_ADJ4 Steering Committee Decision 1/21/16
Criterion Question *	1a	High	High
	1b	Moderate	High/Low
	1c	Low	High/Low
	2a	Moderate/Low	Moderate/Low
	2b	High/Moderate	High
	3	N/A	N/A
	4a	Moderate	Moderate
	4b	Moderate	Moderate
	4c	Moderate/High	High
	4d	Low	Low
	4e	High	High
	5a	Moderate	Moderate/Low
Summary		Required: 1H, 1H/M, 2M, 1M/L, 1L Supplemental: 1H, 2M, 1H/M, 1L	Required: 2H, 2H/L, 2M/L Supplemental: 2H, 2M, 1L
Evaluation Finding		Yes, north of Fourth of July canyon	Yes, north of Fourth of July canyon
Preferred Proposal		Watershed health Forest restoration Unique scenic, botanical, recreational values Traditional cultural resources or North of Fourth of July canyon as potential wilderness	Watershed health Forest restoration Unique scenic, botanical, recreational values Traditional cultural resources
Alternatives for Area		Watershed health Forest restoration Unique scenic, botanical, recreational values Traditional cultural resources or North of Fourth of July canyon as potential wilderness	North of Fourth of July canyon as potential wilderness

* Required criteria are bold—Criterion 1: Apparent Naturalness, Criterion 2: Opportunities for Solitude or Primitive Type of Recreation, and Criterion 3: Manageability. Criterion 3: Areas under 5,000 acres does not have separate considerations, and is evaluated using the other criteria. Criterion 4: Unique and outstanding values is an optional/supplemental criteria that is not required to be present in an area.

Steering Committee Review Notes, 1/21/2016:

STC decided on split findings for 1b (High/Low), 1c (High/Low), 2a (Moderate/Low), 5a (Moderate/Low).
 STC decided on a High for 4c.
 STC concurred with other findings.
 STC clarified overall finding.
 STC edited IDT preferred proposal language and made a decision on a preferred proposal, as IDT was originally split on a recommendation.

DRAFT



Cibola National Forest Mountain Ranger Districts

Wilderness Character Evaluation Criteria Matrix



AREA ID/NAME:

Mountainair Ranger District, Northwestern Manzano Mountain Areas

D4_ADJ1: T7N R5E; 363.89 acres

D4_ADJ2: T6N R5E, T6N R4E; 353.46 acres

D4_ADJ3: T6 R5E, T6N R4E; 325.11 acres

Evaluation Interdisciplinary Team Meeting Date: 1/6/16

Interdisciplinary Evaluation Team (IDT): Forest Service personnel: Natalie Heberling (GIS specialist), Jessica Dunn (Forest Plan Revision Recreation, Scenery, and Designated Areas specialist), Ian Fox (Planning Staff Officer), Aaron Johnson (District Forester), George Long (Acting District Ranger), Amanda Rael (District Biologist), Anthony Martinez (District Fire Specialist), Michael Carpinelli (Forest Plan Revision Vegetation Specialist), Elaine Kohrman (Forest Supervisor), Sarah Browne (Assistant Planner). **Landscape team:** Kelly Smith (Edgewood SWCD), Arturo Archuleta (NM Land Grant Council), Mark Dixon (Pueblo of Isleta DNR), Dan Williams (Claunch-Pinto SWCD), Frank Luna (CP SWCD), Juan Sanchez (NMLGG), Marc LeFrancois (NPS), Lacy Levine (NMDA), Chuck Schultz (NMDGF), Dierdre Tarr (Claunch-Pinto SWCD), Art Swenka (Edgewood SWCD), Cheri Lujan (East Torrance SWCD), Steve Guetschow (Torrance County) Daniel Herrera (La Merced de Manzano), Jeff Goebel (VSWCD), Anna Nunez (La Merced de Manzano), Gloria Zamora (La Merced de Manzano), Juan Sanchez (NM Land Grant Council)

Forest Plan Revision Steering Committee Review and Decision Date: 1/21/16

Criterion 1- Apparent naturalness: The degree to which an area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities? The purpose of this question is to determine if plant and animal communities appear substantially unnatural.

Considerations for 1a:

- How are concentrations of nonnative plants and/or animals distributed across the land?
 - **Narrative:** Geospatial data shows no nonnative species present in area. No information provided by geospatial information, District staff and specialists, or public comment.
- Other (Describe the dominant vegetation types, associations, and plant and animal communities. Include any additional information related to the question above)
 - **Narrative:** There are riparian areas within the areas. Dominant vegetation is pinon-juniper D4_ADJ1. D4_ADJ2 mix of pinon juniper and grama; D4_ADJ3 is all grama. Typical wildlife occurs.

Question 1a Findings

The areas receive a **High** finding, due to no nonnative species populations present; plant and animal communities appear natural.

Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?

Considerations for 1b:

- Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas

- **Narrative:** There are no treatments shown in geospatial data. No information provided by geospatial information, District staff and specialists, or public comment.
- Does the vegetation appear natural (consider elements, including but not limited to vegetation species composition and structure,¹ wildlife, soil, air, etc.)?
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.
- Other:
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 1b Findings

The areas receive a **High** finding; vegetation appears natural.

Question 1c. What is the extent to which improvements² included in the area represent a departure from apparent naturalness?

Considerations for 1c:

- Consider the extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole. Consider the presence and concentrations of all improvements listed below:
 - Appearance of airstrips, heliports, and/or landing zones. Include size of area and description of disturbance (soils, vegetation).
 - Appearance and concentration of linear travelways, including maintenance level 1 roads,³ system non-motorized and motorized trails, and known unauthorized routes (includes decommissioned, temporary, and user created). Consider length and spatial distribution (broadly interspersed vs. concentrated).
 - Appearance and concentration of fences and pipelines. Include miles of fencing or pipeline per square mile.
 - Appearance and concentrations of areas of mining activity, including exploration and prospecting, that were not eliminated in the Phase 3 inventory.⁴ Include size of area and description of disturbance (soils, vegetation).
 - Appearance of range or wildlife improvements that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
 - Appearance of watershed treatment areas (such as contouring, diking, channeling) that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
 - Appearance and concentration of other improvements (including but not limited to water tanks, aviation crash locations, wreckage sites, locations of cemeteries or gravesites, bombing or ordinance locations, and watershed analysis for proposed developments)
 - Other (Include any additional information related to the question above)
 - **Narrative:** D4_ADJ1: contains one unauthorized route overlapping somewhat into the area boundaries on the western edge. District specialist reports that it is a trail, mostly a remnant and not well-traveled (some signage still occurs).

¹ Species composition is the number and proportion of species present. Structure refers to the size, density, and arrangement of plants.

² The use of the term "improvements" in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole.

³ For a glossary of road terminology, please see the *Cibola National Forest Mountain Ranger Districts Assessment Report, Vol, II*, page 258.

⁴ See Appendix A for Substantially Noticeable criteria used in Phase 3 inventory, and Appendix B for results from the Phase 3 Inventory.

- D4_ADJ2: Geospatial data shows one historic mine. Spanish mining in 1600s most likely occurred in area. No remnants of mine appear in geospatial aerial imagery data. Other improvements have been removed from area.
- D4_ADJ3: Two fences and one system trail occur within boundaries. A small portion of an unauthorized route crosses the area. Ojo la Casa Lake reservoir occurs in area- potentially manmade.

Question 1c Findings

ADJ1 receives a **High** finding, due to little or no evidence of human activity.

ADJ2 receives a **High** finding, due to little or no evidence of human activity.

ADJ3 receives a **Low** finding, due to presence of fences across area (little to no screening due to little vegetation cover).

Criterion 2- Outstanding opportunities for solitude or a primitive and unconfined type of recreation: the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Note: The word “or” means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.

Question 2a. Consider impacts that are pervasive and influence a visitor’s opportunity for solitude within the evaluated area.

Note: Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area.

Considerations for 2a:

- Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise?
 - **Narrative:** D4_ADJ1: Eastern edge is adjacent to exiting wilderness. Western edge is adjacent to private land inholding. Meadow Lake is about 5 miles away to the west; area does not have much screening so could be visible from area. District specialist reported that there are opportunities for quiet solitude overall. Team discussed that there could be some light pollution from communities to the west. Access to area is difficult due to private land adjacency, so encounters with other people are not likely. Airport noise is audible.
 - D4_ADJ2: Eastern and southern edge are adjacent to existing wilderness. Area is bisected by a system road that has been cherry-stemmed out of area, but Forest Service personnel report rarely using this road. District specialist reports area is very remote. Access to area is difficult due to private land adjacency, so encounters with other people are not likely. Access is done by hiking in. Airport noise is audible.
 - D4_ADJ3: North and eastern edge are adjacent to existing wilderness. Western edge is adjacent to private land inholding. Landscape team member reports that area is quiet and remote but there are some remnants of civilization (old pilings and trash). Airport noise is audible.
- Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area’s adjacent, cherry-stemmed roads.⁵
 - **Narrative:** D4_ADJ1: eastern edge is adjacent to exiting wilderness. Western edge is adjacent to private land inholding. Meadow Lake is about 5 miles away to the west; area does not have much screening so could be visible from area.

⁵ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase 1 Inventory process.

- D4_ADJ2: Eastern and southern edge are adjacent to existing wilderness. Area is bisected by a system road that has been cherry-stemmed, but FS personnel report rarely using this road. District specialist reports area is very remote. Access to area is difficult due to private land adjacency, so encounters with other people are not likely. Access is done by hiking in. There is a trailhead outside the western edge boundary.
- D4_ADJ3: North and eastern edge are adjacent to existing wilderness. Western edge is adjacent to private land inholding. There is a house and year-round working ranch in the private land inholding south of boundary.
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 2a Findings

D4_ADJ1 and D4_ADJ2 receive a **Moderate** finding, due to the signs of civilization being possible (airport noise and lights from Meadow Lake) and opportunities for solitude being possible (adjacency to existing wilderness).

D4_ADJ3 receives a **Low** finding, due to human activities being unavoidable (airport noise and lights from Meadow Lake and year-round ranch activities).

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.

Note: Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature. This question also relates to miles of fence information from Criterion 1, Question 1c, due to the potential for miles of fence to restrict unconfined recreation opportunities.

Considerations for 2b:

- Describe the types of primitive recreation activities in the area.
 - **Narrative:** Hiking and camping can occur in areas. For D4_ADJ1, the only current access to area is from existing wilderness.
- Describe other types of recreation activities in the area.
 - **Narrative:** Recreational shooting can occur in areas.
- Percent of area with semi-primitive non-motorized recreation opportunity spectrum class.⁶
 - **Narrative:** D4_ADJ1: 51.6% SPNM ROS Class; D4_ADJ2: 100% SPNM ROS Class. D4_ADJ3: 18% SPNM ROS Class.
- Percent of area with a semi-primitive motorized recreation opportunity spectrum class.
 - **Narrative:** D4_ADJ1: 6.9% ROS Class; ROS Class; D4_ADJ2: 0% SPM ROS Class. D4_ADJ3: 0%
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

⁶ The Forest Service's Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. The ROS Inventory Existing Condition maps have been completed for the Forest, and the existing condition of semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) ROS classes are being used as measures. SPNM ROS settings are areas characterized by a predominantly natural or natural-appearing environment, low interaction between users. Primitive activities occur in this setting, and include the following: viewing scenery, hiking, walking, horseback riding, camping, hunting, nature study, mountain climbing, swimming, fishing, etc. Motorized use is not permitted in SPNM ROS settings. SPM ROS class areas provide the same experience and setting as SPNM, but motorized use occurs in addition to primitive-types of recreation. Primitive ROS classes only exist on the Forest in the ROS Inventory Existing Condition within existing wilderness, so are not being used as a measure. These maps are only existing condition, and are subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Forest Plan Revision. Please refer to the Recreation Opportunity Spectrum Handbook and Primer for more information: http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm

Question 2b Findings

The areas receive a **High** finding, due to many opportunities for engaging in primitive types of recreation.

Criterion 3- Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.

Note: If an area on the Phase 3 Inventory maps is under 5,000 acres, it will be evaluated using the other Criteria 1, 2, 3, and 4. Therefore, there are no separate considerations for Criterion 3.

- **Narrative:** This area is adjacent to existing wilderness, so this criterion does not apply.

Criterion 4- Unique and outstanding qualities: the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Note: These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.

Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?

Note: Rare in this context is defined as local or regional.

Considerations for 4a:

- Presence of threatened, endangered, or rare species (from Natural Heritage database and other data sets as available).
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.
- Other (include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4a Findings

The areas receive a **Low** finding, due to no known presence of rare plant or animal communities.

Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?

Considerations for 4b:

- Description of any unique geologic features in the area.
 - **Narrative:** D4_ADJ3: Area has a really beautiful rock face and a scenic view in the southern portion.
- Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class.⁷

⁷ The Forest Service's Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Forest, with District personnel input on areas of the Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. Refer to the Forest Service Scenery Management Handbook for more information: http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf

- **Narrative:** D4_ADJ1: 99.3% Distinctive Scenic Attractiveness class. D4_ADJ2: 10.7% Distinctive Scenic Attractiveness class. D4_ADJ3: 8% Distinctive Scenic Attractiveness class
- Other (include any additional information related to the question above):
 - **Narrative:** D4_ADJ1 and D4_ADJ2 contain natural springs that are significant.

Question 4b Findings

D4_ADJ1, D4_ADJ2, D4_ADJ3 receive a **Low** finding, due to few outstanding landscape features.

Question 4c. Are there historic and cultural resource sites in the area?

Considerations for 4c:

- Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b.
 - **Narrative:** D4_ADJ1: Forest Service archaeologist reports a finding of Unknown, percent surveyed 0%. D4_ADJ2: Forest Service archaeologist reports a finding of Moderate, percent surveyed 0.3%. D4_ADJ3: Forest Service archaeologist reports a finding of Moderate, percent surveyed 12.9%)
- Other (Include any additional information related to the question above)
 - **Narrative:** Report from landscape team that there are significant cultural and pueblo sites in D4_ADJ1.

Note: (Confidentiality requirements with respect to cultural resource sites must be respected (25 U.S.C 3056)).

Question 4c Findings

D4_ADJ1 receives a **High** finding based on landscape team reports of significant sites. D4_ADJ2 and D4_ADJ3 receives a **Moderate** finding; area have some historic and cultural resource sites.

Question 4d. Are there any research natural areas?

Considerations for 4d:

- Percent of area that is part of a research natural area.
 - **Narrative:** 0% research natural area.
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4d Findings

The areas receive a **Low** finding, due to no presence of research natural areas in area.

Question 4e. Are there any high quality water resources or important watershed features?

Considerations for 4e:

- Presence and extent of high quality water resources in the area.
 - **Narrative:** D4_ADJ2 and D4_ADJ3 contain springs and the spring on D4_ADJ_1 is outside the area based on geospatial data and District Specialist information. D4_ADJ_2 spring is cherry-stemmed out but is still fed by surrounding area. All three of these springs have water sources based on District Specialist information. Springs were important for homesteading.
- Other (Include any additional information related to the question above, including whether the water resource meets state water quality standards)

- **Narrative:** Discussion about whether D4_ADJ3 deserved a moderate or low finding due to presence and proportion to small acreage.

Question 4e Findings

D4_ADJ1 and D4_ADJ2 receive a **Low** finding, due to few high quality water resources (spring is outside area in D4_ADJ_1 and spring is cherry-stemmed out in D4_ADJ_2. D4_ADJ3 receives a **Moderate** finding due to presence and proportion of features to small acreage.

Criterion 5- Management: the degree to which the area may be managed to preserve its wilderness characteristics.

Question 5a. Can the area be managed to preserve its wilderness characteristics?

Considerations for 5a:

- Presence and extent of legally established rights or uses within the area. (e.g. active mining claims, grazing allotments, easements, water rights, acequias)
 - **Narrative:** All areas contain active grazing allotments (Monte Largo and Comanche). Only D4_ADJ3 contains improvements that would need maintenance (fencing).
- Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat).
 - **Narrative:** Mexican wolf release potential is in Manzano mountains (10-J experimental release area includes everything south of 1-40 on Forest Service land) but management of wolf release would not affect the ability to manage for wilderness characteristics.
- Presence and extent of non-Federal land and access in the area⁸
 - **Narrative:** D4_ADJ1 shares western border with private inholding and D4_ADJ3 is adjacent to private inholding.
- Describe management of adjacent lands.
 - **Narrative:** D4_ADJ1 shares border with Isleta Pueblo, D4_ADJ1 and D4_ADJ2 border Bureau of Land Management wilderness study area, and D4_ADJ2 and D4_ADJ3 are adjacent to Tome. County has proposed development up to boundary of all three areas. All three areas border existing wilderness.
- Describe presence and extent of cultural and traditional uses of the area (e.g. shrines, ceremonial use, etc.)
 - **Narrative:** There is cultural and traditional use. Wilderness management would not conflict with cultural and traditional use.
- Presence and extent of wildland urban interface in the area. Include acres if possible.
 - **Narrative:** D4_ADJ1: 0% wildland urban interface. D4_ADJ2: 0%. D4_ADJ3: 0%.
- Describe any other management activities or restrictions within in the area (e.g. upcoming management decisions).
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.
- Describe existence and extent of motorized and mechanized uses within the area (trails, routes, special activities).
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

⁸ This consideration, in addition to "Describe management of adjacent lands" and "Presence and extent of 'cherry stemmed' roads or other linear features" informs the consideration of shape and configuration as outlined in FSH 1909.12 Chapter 70.

- Presence and extent of special use permits and authorizations within the area.
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.
- Presence and extent of “cherry stemmed”⁹ roads or other linear features.
 - **Narrative:** One cherry stemmed road in D4_ADJ2 cuts the area in half.
- Other (Include presence of Inventoried Roadless Areas and any additional information related to the question above.)
 - **Narrative:** Team discussed a High finding for D4_ADJ2, due to management to preserve the area’s wilderness characteristics high throughout the area and a Moderate finding due to the presence of the cherry stemmed road that bisects the area, creating a management issue with isolated pockets on either side.

Question 5a Findings

D4_ADJ1 receives a **High** finding, due to management to preserve the area’s wilderness characteristics high throughout the area.

D4_ADJ2 receives a **Moderate** finding due to the presence of the cherry stemmed road that bisects the area.

D4_ADJ3 receives a **Low** finding due to management to preserve the area’s wilderness characteristics low in most areas and due to the proportion of improvements (fencing) within the area.

IDT Findings and Preferred Proposal Discussion (How should this area be managed? Include any suggested alternatives), 1/6/16:

Findings: D4_ADJ1 does have wilderness character throughout the area.

D4_ADJ2 does have wilderness character throughout the area. D4_ADJ3 does not have wilderness character throughout the area due to the presence of various factors considered within individual criterion findings.

Preferred Proposal for all areas: Continue to manage as it is currently being managed. No changes or additional management objectives suggested. Consider keeping as general forest area with active grazing. Concerns about limited access to western side of areas affecting management (i.e. in case of fire) to use as staging area.

However, access is currently limited due to the need for land use access agreements through private lands. Only remaining areas available for future grazing potential improvements. There is consensus from the team that the area should be managed for forest health and watershed health, forest restoration, traditional and cultural uses, permitted and authorized uses. **Alternative for D4_ADJ1:** Should be considered as wilderness for continuity perspective, as a buffer to Isleta Pueblo tribal lands, and due to the land locked nature of the area. **Alternative for D4_ADJ2:** Should be considered as wilderness due to various factors outlined within individual criteria. **Issues of Note Discussed:** Ask Range Manager how alternatives would affect grazing and research why areas were excluded in the past. Based on what research says consider potential wilderness for ADJ1 and ADJ2 as preferred proposal.

Steering Committee Decision, 1/21/16:

Finding:

D4_ADJ1 does have wilderness character throughout the area.

D4_ADJ2 does have wilderness character throughout the area.

D4_ADJ3 does not have wilderness character throughout the area due to the presence of various factors considered within individual criterion findings.

Preferred Proposal for all areas:

Manage areas for forest health, watershed health, forest restoration, traditional and cultural uses, and

⁹ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase I Inventory process.

permitted and authorized uses. Continue to allow active grazing and allow future grazing potential improvements. Pursue easement for access to western side of areas affecting management (i.e. in case of fire) to use as staging area. Access is currently limited due to the need for land use access agreements through private lands. Pursuing access also provides options for trailhead developments in the future.

Alternative for D4_ADJ1:

Consider managing as potential wilderness to maintain and continue integrity of landscape between Isleta Pueblo and existing wilderness to reduce unauthorized use and trespass.

Alternative for D4_ADJ2:

Consider managing southern portion of area as potential wilderness due to various factors outlined within individual criteria.

Other issues to note:

- Ask Range Manager how alternatives would affect grazing and research why areas were excluded in the past.
- Based on what research says consider potential wilderness for ADJ1 and ADJ2 as preferred proposal.

Wilderness Evaluation Findings and Summary Table

Area ID:		D4_ADJ1 IDT Findings 1/6/16	D4_ADJ1 Steering Committee Decisions 1/21/16	D4_ADJ2 IDT Findings 1/6/16	D4_ADJ2 Steering Committee Decisions 1/21/16	D4_ADJ3 IDT Findings 1/6/16	D4_ADJ3 Steering Committee Decisions 1/21/16
Criterion Question*	1a	High	High	High	High	High	High
	1b	High	High	High	High	High	High
	1c	High	High	High	High	Low	Low
	2a	Moderate	Moderate	Moderate	Moderate	Low	Low
	2b	High	High	High	High	High	High
	3	N/A	N/A	N/A	N/A	N/A	N/A
	4a	Low	Low	Low	Low	Low	Low
	4b	Low	Low	Low	Low	Low	Low
	4c	High	High	Moderate	Moderate	Moderate	Moderate
	4d	Low	Low	Low	Low	Low	Low
	4e	Low	Low	Low	Low	Moderate	Moderate
	5a	High	High	High/ Moderate	Moderate	Low	Low
Summary		Required: 5H, 1M Supplemental: 1H, 4L	Required: 5H, 1M Supplemental : 1H, 4L	Required: 4H, 1H/M, 1M Supplemental	Required: 4H, 2M Supplemental : 1M, 4L	Required: 3H, 3L Supplemental:2 M, 3L	Required: 3H, 3L Supplemental:2 M, 3L

			: 1M, 4L			
Evaluation Finding	Yes	Yes	Yes	Yes	No	No
Preferred Proposal	Forest and watershed health access	Forest and watershed health access	Forest and watershed health access	Forest and watershed health access	Forest and watershed health access	Forest and watershed health access
Alternatives for Area	Potential wilderness	Potential wilderness	Southern portion as potential wilderness	Southern portion as potential wilderness	---	---

* Required criteria are bold—Criterion 1: Apparent Naturalness, Criterion 2: Opportunities for Solitude or Primitive Type of Recreation, and Criterion 3: Manageability. Criterion 3: Areas under 5,000 acres does not have separate considerations, and is evaluated using the other criteria. Criterion 4: Unique and outstanding values is an optional/supplemental criteria that is not required to be present in an area.

Steering Committee Review Notes and Decisions, 1/21/2016:

STC decided on a finding for D4_ADJ2 of Moderate for 5a.
STC added trailhead development to preferred proposal.
STC clarified language in proposal and alternatives.
STC concurred with all other findings.



Cibola National Forest Mountain Ranger Districts

Wilderness Character Evaluation Criteria Matrix



AREA ID/NAME:

Mountainair Ranger District, Southeastern Manzano Mountain Area

D4_ADJ5: T3N R5E, T4N R5E, T5N R5E; 7120.61 acres

Evaluation Interdisciplinary Team Meeting Date: 1/6/16

Interdisciplinary Evaluation Team (IDT): Forest Service personnel: Natalie Heberling (GIS specialist), Jessica Dunn (Forest Plan Revision Recreation, Scenery, and Designated Areas specialist), Ian Fox (Planning Staff Officer), Aaron Johnson (District Forester), George Long (Acting District Ranger), Amanda Rael (District Biologist), Anthony Martinez (District Fire Specialist), Michael Carpinelli (Forest Plan Revision Vegetation Specialist), Elaine Kohrman (Forest Supervisor), Sarah Browne (Assistant Planner). **Landscape team:** Kelly Smith (Edgewood SWCD), Arturo Archuleta (NM Land Grant Council), Mark Dixon (Pueblo of Isleta DNR), Dan Williams (Claunch-Pinto SWCD), Frank Luna (CP SWCD), Juan Sanchez (NMLGG), Marc LeFrancois (NPS), Lacy Levine (NMDA), Chuck Schultz (NMDGF), Dierdre Tarr (Claunch-Pinto SWCD), Art Swenka (Edgewood SWCD), Cheri Lujan (East Torrance SWCD), Steve Guetschow (Torrance County), Daniel Herrera (La Merced de Manzano), Jeff Goebel (VSWCD), Anna Nunez (La Merced de Manzano), Gloria Zamora (La Merced de Manzano), Juan Sanchez (NM Land Grant Council)

Forest Plan Revision Steering Committee Review and Decision Date: 1/21/16

Criterion 1- Apparent naturalness: The degree to which an area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities? The purpose of this question is to determine if plant and animal communities appear substantially unnatural.

Considerations for 1a:

- How are concentrations of nonnative plants and/or animals distributed across the land?
 - **Narrative:** Geospatial data shows that there are no nonnative populations in area. Landscape team reports there are riparian areas within area, but that no salt cedar populations exist. No other information provided by geospatial information, District staff and specialists, or public comment.
- Other (Describe the dominant vegetation types, associations, and plant and animal communities. Include any additional information related to the question above)
 - **Narrative:** Large part of area is covered in white fir, mixed tree cover for remainder. Ponderosa pine is the dominant vegetation type. Lower areas (eastern edges and southern portion) contain some pinon-juniper. Mexican Spotted Owl populations and Goshawk Post-Fledgling Areas occur within the area. There are some riparian areas with associated riparian vegetation. Elk are present in the area, small populations that are reestablishing themselves. Deer, turkey, bear, and other standard wildlife occur. Parts of the area have Rocky Mountain Bighorn sheep (southwest corner) and have been reported up above Ox Canyon.

Question 1a Findings

The area receives a **High** finding, due to no reported populations of nonnative species within the area. Composition of plant and animal communities appears natural.

Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?

Considerations for 1b:

- Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas
 - **Narrative:** North and south portions contain burns. Southern area contains Ojo Peak Fire in 2007, and the northern area is Trigo wildfire from 2004. There is a small fire scar from 1970 in the southwestern edge. There have been some treatments overlapping the first scars. Landscape team reports there was a burn for treatment in the 2000s; geospatial data confirms this overlaps the fire scar. There are precommercial thin treatment areas showing within the area boundaries. A hazardous fuel reduction treatment also occurs within the area. FS specialist reports treatments do not appear substantially unnatural to the average visitor. Landscape team reports that the areas within the fire scars could appear substantially unnatural to the average visitor due to the high intensity of the fire. Human uses have been evident on the landscape.
- Does the vegetation appear natural (consider elements, including but not limited to vegetation species composition and structure,¹ wildlife, soil, air, etc.)?
 - **Narrative:** Public comment was received that area does not appear natural because there is a diversion illegally pulling water from Ox Creek that is an impact preventing the natural flow of water going down Ox Creek and impacting the historical apple orchards and grasslands. It is not clear whether this diversion is within the area boundaries. Ox Creek occurs in Ox Canyon, in a small portion of the middle of the area.
- Other:
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 1b Findings

The area receives a **Low** finding; approximately 50% of the area's natural appearance is affected by the fire scars.

Question 1c. What is the extent to which improvements² included in the area represent a departure from apparent naturalness?

Considerations for 1c:

- Consider the extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole. Consider the presence and concentrations of all improvements listed below:
 - Appearance of airstrips, heliports, and/or landing zones. Include size of area and description of disturbance (soils, vegetation).
 - Appearance and concentration of linear travelways, including maintenance level 1 roads,³ system non-motorized and motorized trails, and known unauthorized routes (includes decommissioned, temporary, and user created). Consider length and spatial distribution (broadly interspersed vs. concentrated).
 - Appearance and concentration of fences and pipelines. Include miles of fencing or pipeline per square mile.

¹ Species composition is the number and proportion of species present. Structure refers to the size, density, and arrangement of plants.

² The use of the term "improvements" in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole.

³ For a glossary of road terminology, please see the *Cibola National Forest Mountain Ranger Districts Assessment Report, Vol. II*, page 258.

- Appearance and concentrations of areas of mining activity, including exploration and prospecting, that were not eliminated in the Phase 3 inventory.⁴ Include size of area and description of disturbance (soils, vegetation).
- Appearance of range or wildlife improvements that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
- Appearance of watershed treatment areas (such as contouring, diking, channeling) that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
- Appearance and concentration of other improvements (including but not limited to water tanks, aviation crash locations, wreckage sites, locations of cemeteries or gravesites, bombing or ordinance locations, and watershed analysis for proposed developments)
- Other (Include any additional information related to the question above)
- **Narrative:** In northern portion, area contains a system trail and three small unauthorized routes. Middle portion contains additional system trails, which also occur in the existing wilderness. There is a trailhead and point showing as Red Canyon Picnic Grounds in geospatial data still within area boundaries- may only be still within area boundaries due to a GIS mapping area. There are two decommissioned roads and one unauthorized route. No field knowledge is available on whether or not the decommissioned road has or has not been rehabilitated. Another trailhead occurs (Ox Canyon) within the area boundaries, likely due to mapping error. In southern area, there are two system trails and two small unauthorized routes. Landscape team member reports that these trails were historically developed from game trails. Development of trails is likely consistent with foot traffic. One area has a small portion crossed by a fence (West Barr GK boundary fence on a rested allotment). Cottonwood Spring occurs in the area boundaries. Cottonwood Trailhead occurs within the area (probable GIS error). Priester Canyon Distribution pipeline occurs on east edge, which is no longer in use (not known if it is above or below ground). Four historical mine activity (one titled Goosespring) appear in geospatial data and landscape team member reports that there was heaving mining in 1600s by the Spanish in the Manzanos, but no site-specific information is available on these specific locations. Public comment was received that there is visible evidence of mining, specifically old tailings. There are four decommissioned roads within this area. In the very southern portion of the area there are multiple decommissioned roads and unauthorized roads. There is a lot of use on decommissioned road. Priest Canyon well is also in the area.
- Public comment received on wells, foundations laid, old corrals, and orchards but the commenter did not give locations. Landscape team discussed historical developments within area over time.
- Discussion about unauthorized routes and appearance, especially in southern portion.

Question 1c Findings

The areas receive a **Moderate** finding, due to concentration of decommissioned roads in southern portion of area and unauthorized routes along edges in some areas.

Criterion 2- Outstanding opportunities for solitude or a primitive and unconfined type of recreation: the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Note: The word “or” means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.

Question 2a. Consider impacts that are pervasive and influence a visitor’s opportunity for solitude within the evaluated area.

⁴ See Appendix A for Substantially Noticeable criteria used in Phase 3 inventory, and Appendix B for results from the Phase 3 Inventory.

Note: Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area.

Considerations for 2a:

- Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise?
 - **Narrative:** Eastern edge of area is bounded by cherry-stemmed roads. Western edge is almost entirely adjacent to existing wilderness. Landscape team member reports military base training occurrence at night close to the Manzano mountains. National Forest System Road (NFSR) 422 gets daily use. Public comment was received that visitor's opportunity for solitude is affected by NFSR 422 and the access to private land is frequent. System roads adjacent to northeastern boundary receive heavy use as well. Fuelwood gathering along roads along entire edge is frequent and chainsaw noise is prevalent. Red Canyon Recreation Site is very popular and receives heavy use. Additional public comment was received that area offers opportunities for solitude. From Forest Service Lands specialist: This area inhibits a visitor's opportunity for solitude because NFSR 422 is a primary access route to access multiple parts of the Cibola on the Mountainair Ranger District. From Forest Service Lands specialist: NFSR 422 passes through a number of parcels close to the area. Due to the proximity of the parcels and the interest in the property that private individuals will retain, it would impact the opportunities for solitude. The area is close to private land and may inhibit a visitor's opportunity for solitude within the evaluated area.
- Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area's adjacent, cherry-stemmed roads.⁵
 - **Narrative:** Private land, multiple system roads, recreation developments all occur adjacent to eastern boundary. There are multiple cherry-stemmed roads on eastern boundary as well. Western boundary is adjacent to existing wilderness.
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 2a Findings

This area receives a **Moderate** finding, due to opportunities for solitude along western edge and impacts to solitude along eastern edge.

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.

Note: Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature. This question also relates to miles of fence information from Criterion 1, Question 1c, due to the potential for miles of fence to restrict unconfined recreation opportunities.

Considerations for 2b:

- Describe the types of primitive recreation activities in the area.
 - **Narrative:** Backpacking, hiking, wildlife watching, hunting, equestrian use are all popular within this area. There are a number of system trails provided currently for hiking. Wilderness access occurs from this area. There are a few recreation developments provided along the eastern boundary for hiking and camping recreation opportunities (Red Canyon Campground). Landscape

⁵ The term "cherry stemmed" road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase 1 Inventory process.

team member reported that hunting opportunities are very rich in area and may become more popular.

- Describe other types of recreation activities in the area.
 - **Narrative:** There may be some mountain biking in the northern section.
- Percent of area with semi-primitive non-motorized recreation opportunity spectrum class.⁶
 - **Narrative:** D4_ADJ5: 51.6% SPNM ROS Class
- Percent of area with a semi-primitive motorized recreation opportunity spectrum class.
 - **Narrative:** D4_ADJ5: 0% SPM ROS Class
- Other (Include any additional information related to the question above)
 - **Narrative:** There is a fence that bisects a small section of the southern portion which could interfere with ability to recreate in an unconfined manner.

Question 2b Findings

This area receives a **High** finding, due to many opportunities for engaging in primitive recreation throughout the area.

Criterion 3- Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.

Note: If an area on the Phase 3 Inventory maps is under 5,000 acres, it will be evaluated using the other Criteria 1, 2, 3, and 4. Therefore, there are no separate considerations for Criterion 3.

- **Narrative:** This area is adjacent to existing wilderness, so this criterion does not apply.

Criterion 4- Unique and outstanding qualities: the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Note: These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.

Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?

Note: Rare in this context is defined as local or regional.

Considerations for 4a:

- Presence of threatened, endangered, or rare species (from Natural Heritage database and other data sets as available).
 - **Narrative:** The middle section contains Mexican Spotted Owl Protected Activity Centers, and a portion of Goshawk Post-Fledgling Area in northern section. There have also been sightings of Rocky Mountain Bighorn sheep in the area, which is a species of conservation concern. There is a historic apple tree in the area.

⁶ The Forest Service's Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. The ROS Inventory Existing Condition maps have been completed for the Forest, and the existing condition of semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) ROS classes are being used as measures. SPNM ROS settings are areas characterized by a predominantly natural or natural-appearing environment, low interaction between users. Primitive activities occur in this setting, and include the following: viewing scenery, hiking, walking, horseback riding, camping, hunting, nature study, mountain climbing, swimming, fishing, etc. Motorized use is not permitted in SPNM ROS settings. SPM ROS class areas provide the same experience and setting as SPNM, but motorized use occurs in addition to primitive-types of recreation. Primitive ROS classes only exist on the Forest in the ROS Inventory Existing Condition within existing wilderness, so are not being used as a measure. These maps are only existing condition, and are subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Forest Plan Revision. Please refer to the Recreation Opportunity Spectrum Handbook and Primer for more information: http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm

- Other (include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4a Findings

This area receives a **High** finding, due to presence of three or more rare plant or animal communities.

Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?

Considerations for 4b:

- Description of any unique geologic features in the area.
 - **Narrative:** Crystal Cave occurs above Priest Canyon, and may occur within the area boundaries. No additional information provided by geospatial information, District staff and specialists, or public comment.
- Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class.⁷
 - **Narrative:** D4_ADJ5: 59.6% Distinctive Scenic Attractiveness class; landscape team discussed that the mountains are all scenic.
- Other (include any additional information related to the question above):
 - **Narrative:** Landscape team member reported that Manzano Lake is a popular migratory bird site and part of a huge flyway.

Question 4b Findings

This area receives a **Low** finding, due to few outstanding landscape features.

Question 4c. Are there historic and cultural resource sites in the area?

Considerations for 4c:

- Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b.
 - **Narrative:** D4_ADJ5: FS archaeologist reports a finding of Moderate, percent surveyed 15.8%;
- Other (Include any additional information related to the question above)
 - **Narrative:** Landscape team reports that the area is important for gathering traditional herbs, pinon, chokecherry, etc. and these are important cultural resources. Landscape team reported that there are many historical sites in area. Trails have been used historically and prehistorically, and there is spiritual significance to the area.

Note: (Confidentiality requirements with respect to cultural resource sites must be respected (25 U.S.C 3056)).

Question 4c Findings

⁷ The Forest Service's Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Forest, with District personnel input on areas of the Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. Refer to the Forest Service Scenery Management Handbook for more information: http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf

Area receives a **High** finding due to presence of many historic and cultural resource sites.

Question 4d. Are there any research natural areas?

Considerations for 4d:

- Percent of area that is part of a research natural area.
 - **Narrative:** 0%
- Other (Include any additional information related to the question above)
 - **Narrative:** N/A

Question 4d Findings

This area receives a **Low** finding, due to no percentage of the area containing a research natural area.

Question 4e. Are there any high quality water resources or important watershed features?

Considerations for 4e:

- Presence and extent of high quality water resources in the area.
 - **Narrative:** Area contains important watershed features; primary feeds for watershed occur within area and is water supply to Manzano and Punta de Agua communities. Perennial water present. Drainages replenish water sources outside of the area. Southern portion of polygon has high presence of perennial water (in the form of seeps) which feeds Estancia basin (which includes Mountainair and eastern communities).
- Other (Include any additional information related to the question above, including whether the water resource meets state water quality standards)
 - **Narrative:** Public comment received that Ox Creek does not reflect unique landscape because it does not flow and water has lost its natural beauty and affected habitat. Team reports that it is starting to flow based on recent restoration work.

Question 4e Findings

This area receives a **High** finding, due to the significance of the watershed and the number of high quality water resources in area.

Criterion 5- Management: the degree to which the area may be managed to preserve its wilderness characteristics.

Question 5a. Can the area be managed to preserve its wilderness characteristics?

Considerations for 5a:

- Presence and extent of legally established rights or uses within the area. (e.g. active mining claims, grazing allotments, easements, water rights, acequias)
 - **Narrative:** From Forest Service Lands specialist: There are legally established rights within the area by the Forest Service for an easement used for access purposes on the Cibola. Geospatial data shows that there is a right of way on boundary, and this is most likely the easement discussed (it is the only one in the area. There are no active mining claims within the area. There are two grazing allotments in the area- Barranca in the south is active and Gross Kelley in the north is not active; information is not known on spring maintenance. Pipeline near eastern edge could be used in future but is not currently in use. There is a powerline along the boundary of the eastern edge in the southern portion. There is an acequia that comes out of Ox Canyon.

- Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat).
 - **Narrative:** From Forest Service Lands specialist: There is a presence of Non-Federal Land within the area but there is legal access that has been established on specific parcels in order to efficiently manage the Forest (easement on boundary). There is Mexican Spotted Owl critical habitat within the area, which is not in conflict with managing for wilderness characteristics. Mexican wolf release is potential in Manzano mountains (10-J experimental release area includes everything south of 1-40 on Forest Service land) but management of wolf release would not affect the ability to manage for wilderness characteristics.
- Presence and extent of non-Federal land and access in the area⁸
 - **Narrative:** Eastern edge is adjacent to private land inholdings on northeastern and a small section southeastern. Southwestern edge is adjacent to Casa Colorado Land Grant. There is no known access within area.
- Describe management of adjacent lands.
 - **Narrative:** From Forest Service Lands specialist: The area could be easily managed because of the well-established roads and adjacent parcels of land next to the evaluated area. Adjacent lands are owned by private individuals who acquired the land through land patents, deeds, STA's, or HES's. Landscape team reports that there have been hazardous fuel, watershed health, and wildland urban interface treatments in the northern adjacent lands and one is pending and more proposed. There is a project currently in southern area outside the boundaries. There is grazing on adjacent lands. The southwestern areas outside the boundaries contain a housing development that has potential to grow; this should be considered in analysis.
- Describe presence and extent of cultural and traditional uses of the area (e.g. shrines, ceremonial use, etc.)
 - **Narrative:** Forest Service tribal liaison reports that there is cultural and traditional use. Wilderness management would not conflict with cultural and traditional use, including herb gathering, grazing, hunting, recreational use. The area has traditional use of the trails historically and prehistorically, including the historical movement of the Eucharist. Historical buildings occur in the area, and moving of vigas occur in the area.
- Presence and extent of wildland urban interface in the area. Include acres if possible.
 - **Narrative:** D4_ADJ5: 51% wildland urban interface occurring on in northern and middle portions.
- Describe any other management activities or restrictions within in the area (e.g. upcoming management decisions).
 - **Narrative:** Thunderbird Ecosystem Management project is ongoing, and there is a prescribed burn approved in that area (occurs in middle portion). There have been proposed projects for RCCP (range improvement projects) and Bighorn Sheep habitat projects (approximately 600 acres) in southern area.
- Describe existence and extent of motorized and mechanized uses within the area (trails, routes, special activities).
 - **Narrative:** Unauthorized routes occur but no authorized motorized trails or routes occur within area.
- Presence and extent of special use permits and authorizations within the area.

⁸ This consideration, in addition to "Describe management of adjacent lands" and "Presence and extent of 'cherry stemmed' roads or other linear features" informs the consideration of shape and configuration as outlined in FSH 1909.12 Chapter 70.

- **Narrative:** There is a special use authorization reported in geospatial data in the northern portion about a communications project, but that is most likely Capilla Peak which is outside the area boundaries.
- Presence and extent of “cherry stemmed”⁹ roads or other linear features.
 - **Narrative:** There are cherry-stemmed roads along the eastern boundary.
- Other (Include presence of Inventoried Roadless Areas and any additional information related to the question above.)
 - **Narrative:** There are no IRAs in area.
 - Unauthorized fuelwood/building material gathering is a use in area that could be in conflict with wilderness character management if done by vehicle- consider in alternative development. Unauthorized routes occur but no authorized motorized trails or routes occur within area.

Question 5a Findings

This area receives a **Low** finding, due to other management activities within and outside of area conflicting with wilderness character and the presence of wildland urban interface, and the active grazing allotment and grazing in surrounding areas.

IDT Findings and Preferred Proposal Discussion (How should this area be managed? Include any suggested alternatives), 1/6/16: Finding: Area does not have wilderness character. Throughout area there are detractors from wilderness character evident in the ratings for each of the individual criteria findings; fire scar, watershed activities, cherry-stemmed roads, etc. **Preferred Proposal:** There is consensus from the team that the area should be managed for watershed protection and health, forest restoration, traditional and cultural uses, permitted and authorized uses. Watershed health of this area affects areas outside of the area boundaries. Watershed health and restoration are important and access into these areas for treatment is imperative. Protecting water resources for adjacent communities is important (prioritizing eastern edge). Regeneration, sustainability, multiple use, species diversity, ecological function [see Mountainair Ranger District Vision Statement]. Manage for sensitivity (to timing, life cycles, etc). Consider management areas called “watershed critical habitat” with specific management direction and the timing of follow-up treatments. Mountain is an entity that needs to be managed as a whole. Managing to capture more water in the soil for infiltration and recharge and improving soil health. Need to focus on using the water; putting water to beneficial use. **Issues of Note Discussed:** Consider for future project-planning: There has been interest from Land Grant in reactivating the Gross Kelley grazing allotment. Gross Kelley as a communal community allotment-consumption based – sheep or cow depending on preference. Request from New Mexico Game and Fish that livestock grazing should be limited to cows due to potential for disease effects on wild sheep populations. Timing of use important to consider; corridors; locations. There is historical dispute on the Forest Service boundary regarding the Land Grants and use rights. There have been reported disputes with FS boundary (approximately 30 acres) in the area but it is unknown if acres exist within the area boundaries.

Steering Committee Decision, 1/21/16:

⁹ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase I Inventory process.

Finding:

Area does not have wilderness character. Throughout area there are detractors from wilderness character evident in the ratings for each of the individual criteria findings; fire scar, watershed activities, cherry-stemmed roads, etc.

Preferred Proposal:

Manzano Mountains are an entity that needs to be managed as a holistic system. Manage to regenerate the capacity for new life in the system, including nutrient cycling and watershed capacity to promote resilient and healthy watersheds and forests, to benefit and support traditional, spiritual, cultural values and authorized uses. Proper timing and intensity of management activities sustains ecological health. Protecting and providing water resources is important (prioritizing eastern edge) to adjacent communities outside of the area.

Alternative:

- Pursue reactivating the Gross Kelley grazing allotment as a Manzano Land Grant communal community allotment- consumption based – sheep or cow depending on preference. Need to research decision (1982); this may not be an option. Request from New Mexico Game and Fish that livestock grazing should be limited to cows due to potential for disease effects on wild sheep populations. Timing of use important to consider; corridors; locations; season of use threshold.

Wilderness Evaluation Findings and Summary Table

Area ID:		D4_ADJ5 IDT Findings 1/6/16	D4_ADJ5 Steering Committee Decision 1/21/2016
Criterion Question*	1a	High	High
	1b	Low	Low
	1c	Moderate	Moderate
	2a	Moderate	Moderate
	2b	High	High
	3	N/A	N/A
	4a	High	High
	4b	Low	Low
	4c	High	High
	4d	Low	Low
	4e	High	High
	5a	Low	Low
Summary		Required: 2H, 2M, 2L Supplemental: 3H, 2L	Required: 2H, 2M, 2L Supplemental: 3H, 2L
Evaluation Finding		No	No
Preferred Proposal		Holistic entity Regenerative capacity Benefits Watersheds, forests	Holistic entity Regenerative capacity Benefits Watersheds, forests

	Traditional spiritual cultural values	Traditional spiritual cultural values
Alternatives for Area	Pursue Gross Kelley allotment analysis	Pursue Gross Kelley allotment analysis

* Required criteria are bold—Criterion 1: Apparent Naturalness, Criterion 2: Opportunities for Solitude or Primitive Type of Recreation, and Criterion 3: Manageability. Criterion 3: Areas under 5,000 acres does not have separate considerations, and is evaluated using the other criteria. Criterion 4: Unique and outstanding values is an optional/supplemental criteria that is not required to be present in an area.

Steering Committee Review Notes and Decisions, 1/21/2016:

STC concurred with team's finding of High for 4c
STC concurred with IDT findings, and cleaned up proposal and alternatives language.

DRAFT



Cibola National Forest Mountain Ranger Districts

Wilderness Character Evaluation Criteria Matrix



AREA ID/NAME:

Mountainair Ranger District, Southern Gallinas Mountain Area

D4_5K2: T2S R11E, T2S R12E, T1S R11E, T1S R12E; 7549.32 acres

Evaluation Interdisciplinary Team Meeting Date: 12/10/15

Interdisciplinary Evaluation Team (IDT): Forest Service personnel: Natalie Heberling (GIS specialist), Jessica Dunn (Forest Plan Revision Recreation, Scenery, and Designated Areas specialist), Ian Fox (Planning Staff Officer), Aaron Johnson (District Forester), Rob Arlowe (GIS specialist), Alan Warren (District Range Specialist), George Long (Acting District Ranger), Amanda Rael (District Biologist), Arlene Perea (District Recreation Specialist), Anthony Martinez (District Fire Specialist), Michael Carpinelli (Forest Plan Revision Vegetation Specialist). **Landscape team:** Kelly Smith (Edgewood SWCD), Arturo Archuleta (NM Land Grant Council), Paul Lujan (Pueblo of Isleta DNR), Dan Williams (Claunch-Pinto SWCD), Frank Luna (CP SWCD), Juan Sanchez (NMLGG), Marc LeFrancois (NPS), Art Swenka (Edgewood SWCD), Lacy Levine (NMDA), Chuck Schultz (NMDGF), Dierdre Tarr (Claunch-Pinto SWCD), Cheri Lujan (East Tarrant SWCD), Steve Guetschow (Tarrant County). **Facilitator:** Kathleen Bond

Forest Plan Revision Steering Committee Review and Decision Date: 1/21/16

Criterion 1- Apparent naturalness: The degree to which an area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities? The purpose of this question is to determine if plant and animal communities appear substantially unnatural.

Considerations for 1a:

- How are concentrations of nonnative plants and/or animals distributed across the land?
 - **Narrative:** Geospatial data shows no populations of nonnative plants within or around the area boundaries. District specialist confirms this. Landscape team member reports some thistles along National Forest System Road 161 but says populations are mostly confined, and are on outskirts of area boundaries.
- Other (Describe the dominant vegetation types, associations, and plant and animal communities. Include any additional information related to the question above)
 - **Narrative:** Landscape team member reports there are wildlife drinkers and pinon juniper, ponderosa, and team discussed burn scar from Pinatosa Fires in 1996 and 2001. Landscape team members discussed that scar probably contains oak, ponderosa, scrub oak. Geospatial data reports pinon juniper over burn scar. Forest Service specialist reports a lot of burn scar is also grasslands. There have been high deer populations occurring in past; New Mexico Game and Fish has been researching cougar and deer interactions. Feral hogs were spotted outside of the area boundaries along edge of road; track for further management discussions

Question 1a Findings

The area receives a **High** finding; plant and animals not appearing substantially unnatural throughout the area.

Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?

Considerations for 1b:

- Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas
 - **Narrative:** Geospatial data shows one treatment adjacent to the far northeastern corner of the area, a 57 acre salvage cut in 2004. District specialists report that during the inventory substantially noticeable exercise, this salvage cut was determined to be substantially noticeable and it was removed from the area boundaries. No other treatments appear within the area boundaries.
- Does the vegetation appear natural (consider elements, including but not limited to vegetation species composition and structure,¹ wildlife, soil, air, etc.)?
 - **Narrative:** Public comment was received that commented on the fire history within the area ; before the fires, area had not burned since 1900 and this caused 99% of trees to be killed during the fires and now contains sick and dying trees and area will not appear to be undisturbed by human activity unless area is restored to 1906 landscape. Commenter continued that areas that did not burn in those fires are still overstocked. Forest Service specialist commented that looking at natural range of variability at this small of a scale is not accurate, because this overstocked/fire burned area could have occurred in this isolated pocket within natural range of variability. More public comment was received that nearly the entire area was devastated by a tremendous fire and current vegetation species composition and structure is in regrowth, and that no thinning was noticed within the area and nothing is left there to thin. Commenter continued that area appears natural to the extent that it is recovering from fire, and that no wildlife was observed (possibly due to hunting season nearing, but deer scat was reported). Discussion amongst the team about whether a burn scar appears natural or not natural to an average visitor. Assumption in process that for apparent naturalness, fire suppression does not appear unnatural to the average visitor; majority of team discussed that fire is a natural appearing process in the landscape even to the average visitor.
- Other:
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 1b Findings

The area receives a **High**, due to vegetation appearing natural to the average visitor; fire is the only impact on the landscape and team finds that this appear natural to average visitor.

¹ Species composition is the number and proportion of species present. Structure refers to the size, density, and arrangement of plants.

Question 1c. What is the extent to which improvements² included in the area represent a departure from apparent naturalness?

Considerations for 1c:

- Consider the extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole. Consider the presence and concentrations of all improvements listed below:
 - Appearance of airstrips, heliports, and/or landing zones. Include size of area and description of disturbance (soils, vegetation).
 - Appearance and concentration of linear travelways, including maintenance level 1 roads,³ system non-motorized and motorized trails, and known unauthorized routes (includes decommissioned, temporary, and user created). Consider length and spatial distribution (broadly interspersed vs. concentrated).
 - Appearance and concentration of fences and pipelines. Include miles of fencing or pipeline per square mile.
 - Appearance and concentrations of areas of mining activity, including exploration and prospecting, that were not eliminated in the Phase 3 inventory.⁴ Include size of area and description of disturbance (soils, vegetation).
 - Appearance of range or wildlife improvements that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
 - Appearance of watershed treatment areas (such as contouring, diking, channeling) that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
 - Appearance and concentration of other improvements (including but not limited to water tanks, aviation crash locations, wreckage sites, locations of cemeteries or gravesites, bombing or ordinance locations, and watershed analysis for proposed developments)
 - Other (Include any additional information related to the question above)
 - **Narrative:** There are several fences scattered throughout the area. Public comment received verifying that these are South Canyon range Allotment fence, Pinatosa range allotment fence, Pinatosa High Drift fence, and Iron Mine Drift fence. There are a number of drinkers within the area that have been removed as substantially noticeable in inventory. Bryan Tank (earthen tank) and South Mountain are within the area and were considered not substantially noticeable in inventory. Landscape team member reports that some of the drinkers could be underground without above ground infrastructure. South Mountain is in the middle of the area and does not have any visible access to it. Wildlife drinkers were excluded in the substantially noticeable inventory phase but it is not known if the associated drinker fences were excluded. This fenced area could be up to 2 acres.
 - Landscape team member reports that there was some mining exploration by a member of the public (not open scars or pits) and that some reclamation had been observed in the past. Geospatial data shows four mine points in area; landscape team members report that those are rare earth mining exploration points and impacts are not visible (likely nothing more than a small pad and drill hole which have been reclaimed). Landscape team member reports there may be some historical mining evidence still in the area on the eastern side that contains some tailings- all that were determined to be substantially noticeable were removed. Geospatial data show these have already been removed from area boundaries.

² The use of the term "improvements" in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole.

³ For a glossary of road terminology, please see the *Cibola National Forest Mountain Ranger Districts Assessment Report, Vol, II*, page 258.

⁴ See Appendix A for Substantially Noticeable criteria used in Phase 3 inventory, and Appendix B for results from the Phase 3 Inventory.

- There are several decommissioned routes within area. Forest Service specialist reports these were most likely decommissioned a number of years ago- did not happen under Travel Management. There is a long decommissioned route that runs north to south in the area. Forest Service specialists report that project-level decommissioning and reclaiming has likely not occurred. Decommissioned routes are not being used by grazing permittees but are used by hunters. Forest Service specialists report that storms and tree fall have made those routes very difficult to use.
- Special uses geospatial data shows ¼ of a section, township, and range identified for special uses overlapping the southern edge of the area. Geospatial data shows that the type of special use authorization is for a telephone line which could have been excluded during inventory. Forest Service specialist reports there are no overhead lines in area and it could be underground. District reports no knowledge of the type of authorization or whether it is within the area boundaries.
- Public comment was received that ATVs use at least the main road, and that one ATV was noticed within area on a road. Roads are excluded. Commenter continues that appearance of mining activity was reported near campground and was an excluded area.

Question 1c Findings

The area receives a **Moderate** finding, due appearance and concentration of improvements detract from apparent naturalness in some areas (decommissioned road beds, fences, and drinkers scattered throughout the area).

Criterion 2- Outstanding opportunities for solitude or a primitive and unconfined type of recreation: the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.

Note: The word “or” means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.

Question 2a. Consider impacts that are pervasive and influence a visitor’s opportunity for solitude within the evaluated area.

Note: Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area.

Considerations for 2a:

- Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise?
 - **Narrative:** Landscape team member reports that noise is very quiet in the area, due to screening and distance from outside developments outside of the burn scar; noise is the only issue—there are no developments and area is very remote. Forest Service specialists report topography is low and gradual slope from south end going up about a third of the way into more steep country; screening pretty high below (pinyon juniper) and upwards screening is less due to impacts of fire. Area is ringed by roads and you can hear when a vehicle drives by from lower highway and travels upwards. During hunting season it is more pervasive and noise from semi-trucks is heard all the way up into the east portions of the area. Landscape team members report there is heavy traffic on National Forest System Road 161. Landscape team member reports a flagstone quarry a half mile south of the area. Area is about 4 miles wide at its widest point.

- Public comment received that topography has high rolling hills and a lack of development is evident except at campgrounds, which are excluded and there are no other developments. Commenter continues that only two human beings were encountered in area during experience in area and reports that there is a total opportunity for solitude. Forest Service specialist reports that the campground has low use except during hunting season. Additional public comment received that area has exceptional opportunities for solitude.
- Landscape team member reports that the area is highly hunted with noise from gunshots throughout the area during hunting season.
- Team discussion about solitude being possible in northern areas but not near areas adjacent to roads or during hunting season.
- Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area's adjacent, cherry-stemmed roads.⁵
 - **Narrative:** Area is bounded by National Forest System Road 161 in the south, National Forest System Road 99 in northeast, and northwest boundary was created around old roads and mining areas, and area is adjacent to private lands on east and west side of boundaries.
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 2a Findings

The area receives a **Moderate** finding, due to opportunities for solitude in some areas but signs of civilization (adjacent roads and associated noise, and seasonal hunting use) are possible.

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.

Note: Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature. This question also relates to miles of fence information from Criterion 1, Question 1c, due to the potential for miles of fence to restrict unconfined recreation opportunities.

Considerations for 2b:

- Describe the types of primitive recreation activities in the area.
 - **Narrative:** Camping, hiking, horseback riding, archery/bow hunting Forest Service specialist reports that most of these activities are associated with hunting. There are no established trails in the area; even weekends and holidays use is low. Recreation use is only heavy during hunting season, with low local use throughout the year. Bird watching of ravens in area is also interesting.
 - Public comment received that recreation activities include wildlife observation, hiking, backpacking, cross-country skiing, horseback riding, hunting, camping, pinon nut gathering, and enjoying nature.

⁵ The term "cherry stemmed" road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase 1 Inventory process.

- Additional public comment received that area has exceptional opportunities for primitive recreation.
- Discussion about no trails and limited access affording high opportunity for primitive recreation.
- Hunting using firearms is very popular in this area, and camping is high during hunting season. There are 350 deer licenses using any legal sporting arm, 100 licenses archery only, 100 muzzle-loader licenses, and 15 elk licenses for Game Management Unit 38 which is completely within the area.
- Describe other types of recreation activities in the area.
 - **Narrative:** No known mountain biking is reported in this area, by Forest Service specialists and landscape team members.
- Percent of area with semi-primitive non-motorized recreation opportunity spectrum class.⁶
 - **Narrative:** D4_5K2: 62.7% SPNM ROS Class
- Percent of area with a semi-primitive motorized recreation opportunity spectrum class.
 - **Narrative:** D4_5K2: 13.7% SPM ROS Class
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 2b Findings

The area receives a **High** finding, due to many opportunities for engaging in primitive recreation and few opportunities to engage in nonprimitive recreation (confined to seasonal use of hunters using firearms)

Criterion 3- Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.

Note: If an area on the Phase 3 Inventory maps is under 5,000 acres, it will be evaluated using the other Criteria 1, 2, 3, and 4. Therefore, there are no separate considerations for Criterion 3.

- **Narrative:** This area is over 5,000 acres, so this criterion does not apply.

Criterion 4- Unique and outstanding qualities: the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Note: These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.

⁶ The Forest Service's Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. The ROS Inventory Existing Condition maps have been completed for the Forest, and the existing condition of semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) ROS classes are being used as measures. SPNM ROS settings are areas characterized by a predominantly natural or natural-appearing environment, low interaction between users. Primitive activities occur in this setting, and include the following: viewing scenery, hiking, walking, horseback riding, camping, hunting, nature study, mountain climbing, swimming, fishing, etc. Motorized use is not permitted in SPNM ROS settings. SPM ROS class areas provide the same experience and setting as SPNM, but motorized use occurs in addition to primitive-types of recreation. Primitive ROS classes only exist on the Forest in the ROS Inventory Existing Condition within existing wilderness, so are not being used as a measure. These maps are only existing condition, and are subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Forest Plan Revision. Please refer to the Recreation Opportunity Spectrum Handbook and Primer for more information: http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm

Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?

Note: Rare in this context is defined as local or regional.

Considerations for 4a:

- Presence of threatened, endangered, or rare species (from Natural Heritage database and other data sets as available).
 - **Narrative:** Geospatial data shows no populations within the area. Discussion about Merriam turkey within area; these occur in other areas in the state.
- Other (include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4a Findings

The area receives a **Low** finding, due to no populations within the area.

Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?

Considerations for 4b:

- Description of any unique geologic features in the area.
 - **Narrative:** From Forest Service minerals specialist: The Gallinas mountains are formed from an exhumed laccolith, a cooled, underground magma body later exposed by erosion.
- Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class.⁷
 - **Narrative:** D4_5K2: 0% Distinctive Scenic Attractiveness class. Some significant scenic viewpoints within the area are viewed from outside of the area along the roads.
 - Public comments received that there are vistas of scenic landscape for tens of miles in nearly any direction. Additional public comment received that views north, south, and east from the Gallinas lookout area display truly scenic quality (outside the area boundaries). Forest Service specialist reports scenic views are outside of area.
- Other (include any additional information related to the question above):
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4b Findings

⁷ The Forest Service's Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Forest, with District personnel input on areas of the Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. Refer to the Forest Service Scenery Management Handbook for more information: http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf

The area receives a **Low** finding, due to few to no outstanding landscape features within the area.

Question 4c. Are there historic and cultural resource sites in the area?

Considerations for 4c:

- Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b.
 - **Narrative:** D4_5K2: Forest Service archaeologist reports a finding of Moderate, percent surveyed 9.6%. Team discussed the small percentage of the area that has been surveyed. Forest Service specialist and landscape team member report that this is most likely an accurate finding based on the historical use/presence, evidence, and past of the area, even with the small percentage surveyed.
 - Public comment received that area is historically connected to other important historical/cultural sites such as Gran Quivera, Pueblo Colorado, and Pueblo Blanco. Team agrees.
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Note: (Confidentiality requirements with respect to cultural resource sites must be respected (25 U.S.C 3056)).

Question 4c Findings

D4_5K2 receives a **Moderate** finding due to presence of some historic and cultural sites.

Question 4d. Are there any research natural areas?

Considerations for 4d:

- Percent of area that is part of a research natural area.
 - **Narrative:** 0%
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4d Findings

The area receives a **Low** finding, due to no research natural areas within the area boundaries.

Question 4e. Are there any high quality water resources or important watershed features?

Considerations for 4e:

- Presence and extent of high quality water resources in the area.
 - **Narrative:** Landscape team member reports no surface water in area; Forest Service specialists report that there are three springs in all of Gallinas mountains and two are nonfunctional currently due to drought and lack of recharge. Team discussed that area does not contain unique or outstanding water resources.
- Other (Include any additional information related to the question above, including whether the water resource meets state water quality standards)

- **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4e Findings

The area receives a **Low** finding, due to no presence of high quality water resources in the area.

Criterion 5- Management: the degree to which the area may be managed to preserve its wilderness characteristics.

Question 5a. Can the area be managed to preserve its wilderness characteristics?

Considerations for 5a:

- Presence and extent of legally established rights or uses within the area. (e.g. active mining claims, grazing allotments, easements, water rights, acequias)
 - **Narrative:** There are active mining claims. Three sections contain active mining claims; one section is entirely within the area boundaries and contains nine active claims, and potentially more from the other sections but exact amount from those are not known (the other sections that overlap the area contain 5-14 claims but it is not known how many occur within the area). These active claims are most likely rare earth minerals and associated minerology. Impacts from large-scale extraction would include toxic tailings and associated mining impacts from extraction.
 - There are two grazing allotments (Bonito and Antelope allotments) and two general resource areas that overlap the area. There are a few grazing improvements within the area. Two drift fences and two allotment boundary fences occur in the area.
- Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat).
 - **Narrative:** From Forest Service minerals specialist: US Mining Law, as amended: Activities on an active mining claim, even on non-wilderness at the end of a cherry-stemmed road, would take place imbedded in a wilderness. The presence of active mining claims indicate an established right to access minerals. Exploration activities are proposed and can be authorized. Team discussed the legal claims occur in the northern section as noted above, and are considered, but potential for future claims would be appropriate under analysis. Public comment was received about rare earth minerals in area and exploration was permitted by the state mining and minerals division, but no location was provided.
 - Non experimental population of Mexican Grey wolf- this area falls under zone 2 which includes specific guidance that wolves be released in a manner that allows them to naturally disperse and occupy area; management of wolf release would not affect the ability to manage for wilderness characteristics.
- Presence and extent of non-Federal land and access in the area⁸

⁸ This consideration, in addition to "Describe management of adjacent lands" and "Presence and extent of 'cherry stemmed' roads or other linear features" informs the consideration of shape and configuration as outlined in FSH 1909.12 Chapter 70.

- **Narrative:** Private land occurs on the eastern and western edges and some in the south; the north is managed by Forest Service.
- Describe management of adjacent lands.
 - **Narrative:** Private land occurs on the eastern and western edges and some in the south; the north is managed by Forest Service. Landscape team reports that there are no restoration activities occurring on these adjacent private lands currently.
- Describe presence and extent of cultural and traditional uses of the area (e.g. shrines, ceremonial use, etc.)
 - **Narrative:** Forest Service specialists report that cultural and traditional use in this area is unknown at this time. No information has been provided. Wilderness management would not likely conflict with cultural and traditional use.
- Presence and extent of wildland urban interface in the area. Include acres if possible.
 - **Narrative:** D4_5K2: 0% wildland urban interface
- Describe any other management activities or restrictions within in the area (e.g. upcoming management decisions).
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.
- Describe existence and extent of motorized and mechanized uses within the area (trails, routes, special activities).
 - **Narrative:** Nothing within the area is open to motorized travel. No other information provided by geospatial information, District staff and specialists, or public comment.
- Presence and extent of special use permits and authorizations within the area.
 - **Narrative:** The telephone line special use authorization is outside of the area. No other information provided by geospatial information, District staff and specialists, or public comment.
- Presence and extent of “cherry stemmed”⁹ roads or other linear features.
 - **Narrative:** Geospatial data shows that the National Forest System Road 161G is cherry-stemmed into the middle of the area and some smaller roads are cherry stemmed out along the edges.
- Other (Include presence of Inventoried Roadless Areas and any additional information related to the question above.)
 - **Narrative:** From FS minerals specialist: The presence of a mineral of importance to the United States indicates that the potential to locate mining claims and conduct exploration for a deposit should remain open. This would mean leaving the area available for future exploration, i.e. non-wilderness. D4-5K2 is an area of the known presence of Rare Earth Elements REE. STC decided this issue would be appropriate for analysis, not evaluation, if area moved forward as a recommendation of potential wilderness.
 - From FS minerals specialist: The Gallinas mountains are formed from an exhumed laccolith, a cooled, underground magma body later exposed by erosion. This is true for the central core, as well as the surrounding halo of mineralization (the broad area is needed). Access to the feature for scientific and educational study would include testing (drilling) or other mechanized means of

⁹ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase I Inventory process.

data gathering. This information was discussed by the team as something that could be considered in analysis but not in evaluation of wilderness character.

- o From Forest Service minerals specialist: US Mining Law, as amended: Activities on an active mining claim, even on non-wilderness at the end of a cherry-stemmed road, would take place imbedded in a wilderness. The presence of active mining claims indicate an established right to access minerals. Exploration activities are proposed and can be authorized. These heavy-equipment activities (drilling and support vehicles) would be seen and heard imbedded in the wilderness. Should mining development activities ever occur on these mining claims, which they legally could, it would be incompatible with the surrounding wilderness character. See polygon(s) D4-5K2 : removed area: Although the cherry-stemmed configuration avoids the only active mining claims and allows access, exploration, by its nature, cannot be restricted to a small area. Former mining areas and past mining claims have clearly covered much of the lower Gallinas area in the past. The cherry-stemmed road in the southern part of the (Gallinas) mountains in the Mountainair District does not fulfill the need to allow exploration in a known mineralized area. The area should remain open for operations allowed under the mining law. This especially should be allowed for an important mineral commodity where the price trend is expected to continue rise over time, in this case, Rare Earth Elements (REE). Should there be active mining claims within a proclaimed wilderness; the potential exists for mineral activity to be proposed on the claim. Before any activities could take place it is required that there be a Validity Examination and Report completed by certified mineral examiners. These examinations are costly and time-consuming to the government, especially if they go into litigation. There is the possibility that nuisance litigation may be brought against the government (from claimants) in hopes of a settlement, tying up resources for multiple years. Should mining claims be determined to valid, mining could occur. Landscape team reports that an area on the Lincoln went through a similar situation, and if a company went in and do core sampling and requested a mine they would have to prove to the Forest Service that there were resources that can be developed commercially. Additionally, creating a cherry-stemmed road into mining claims meant to allow exploration is not necessarily useful. Exploration, by nature is a moving target, as the claimant chases the presence of a valuable commodity where it leads in order to find the deposit. If the area were to become wilderness, further exploration would be curtailed by the withdrawal of the area to any additional mining claims. Team discussed that only active mining claims (not speculative potential future) will be considered in this evaluation, as those are legally established. Steering committee reviewed this issue and determined this is an appropriate issue for analysis, not evaluation, if areas moves forward in an alternative as potential wilderness.

Question 5a Findings

The area receives a Moderate finding, due to other management uses and activities occurring in scattered areas within the area (active mining claims and some grazing allotment improvements).

IDT Findings and Preferred Proposal Discussion (How should this area be managed? Include any suggested alternatives), 1/6/16:

The team finds that the area overall contains wilderness character based on the findings for each other questions and criteria. The team proposes to remove the areas with active mining claims and create a buffer from National Forest System Road 161 to reduce pervasive noise that is concentrated

in those areas. Consider the impacts of National Forest System Road 99 as well. Wilderness character is concentrated in areas where there are no active mining claims and away from the roads. Size of modified area, if it is then below 5,000 acres, would need to be considered under Criterion 3: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable. This is not considered in this evaluation meeting, as this is not a decision-making body, and will need to be considered by steering committee. Another alternative is to continue managing the area as general forest area, and to consider if forest restoration projects are priorities in the area. Additionally, area could be managed with a focus on the educational and scientific studies of the unique geologic nature of the Gallinas mountain and continued access to the feature, including opportunities for testing (drilling) or other mechanized means of data gathering. Hunting is a popular activity in this area; primitive recreation including hunting should be the focus of recreation in the area. The preferred proposal from the team is an alternative reflecting a combination of the two management suggestions above. Other Issues of Note: Feral hogs were spotted outside of the area boundaries along edge of road; track for further management discussions.

Steering Committee Decision, 1/21/16:

Finding:

Interior area contains wilderness character based on the findings for each other questions and criteria.

Preferred Proposal:

Manage area for primitive recreation and scientific and educational study of unique geology of Gallinas mountains. Allow active mining to continue.

Wilderness Evaluation Findings and Summary Table

Area ID:		D4_5K2 IDT Findings 12/10/15	D4_5K2 Steering Committee Decision 1/21/2016
Criterion Question *	1a	High	High
	1b	High	High
	1c	Moderate	Moderate
	2a	Moderate	Moderate
	2b	High	High
	3	N/A	N/A
	4a	Low	Low
	4b	Low	Low
	4c	Moderate	Moderate
	4d	Low	Low
	4e	Low	Low
	5a	Moderate	Moderate
Summary		Required: 3H, 3M Supplemental: 1M, 4L	Required: 3H, 3M Supplemental: 1M, 4L

Evaluation Finding	Yes, interior portion	Yes, interior portion
Preferred Proposal	Primitive recreation, Mining, Educational geologic features	Primitive recreation, Mining, Educational geologic features
Alternatives for Area	Interior potential wilderness if over 5k acres	None

* Required criteria are bold—Criterion 1: Apparent Naturalness, Criterion 2: Opportunities for Solitude or Primitive Type of Recreation, and Criterion 3: Manageability. Criterion 3: Areas under 5,000 acres does not have separate considerations, and is evaluated using the other criteria. Criterion 4: Unique and outstanding values is an optional/supplemental criteria that is not required to be present in an area.

Steering Committee Review Notes and Decisions, 1/20/2016:

STC considered interior portion that was found to have wilderness character as recommended wilderness. STC decided area was insufficient for potential wilderness due to current and high potential for future mining activities.

DRAFT



Cibola National Forest Mountain Ranger Districts

Wilderness Character Evaluation Criteria Matrix



AREA ID/NAME:

Mountainair Ranger District, Southwestern Manzano Mountain Area

D4_ADJ6: T5N R4E; 567.09 acres

D4_ADJ7: T4N R4E, T5N R4E; 356.49 acres

D4_ADJ8: T4N R4E; 245.51 acres

Evaluation Interdisciplinary Team Meeting Date: 12/10/15-12/11/15

Interdisciplinary Evaluation Team (IDT): Forest Service personnel: Jessica Dunn (Forest Plan Revision Recreation, Scenery, and Designated Areas specialist), Ian Fox (Planning Staff Officer), Aaron Johnson (District Forester), Rob Arlowe (GIS specialist), Alan Warren (District Range Specialist), George Long (Acting District Ranger), Amanda Rael (District Biologist), Arlene Perea (District Recreation Specialist), Anthony Martinez (District Fire Specialist), Michael Carpinelli (Forest Plan Revision Vegetation Specialist), Sarah Browne (Assistant Planner). **Landscape team:** Kelly Smith (Edgewood SWCD), Arturo Archuleta (NM Land Grant Council), Paul Lujan (Pueblo of Isleta DNR), Dan Williams (Claunch-Pinto SWCD), Frank Luna (CP SWCD), Lacy Levine (NMDA), Chuck Schultz (NMDGF), Dierdre Tarr (Claunch-Pinto SWCD), Cheri Lujan (East Torrance SWCD), Steve Guetschow (Torrance County)

Facilitator: Kathleen Bond

Forest Plan Revision Steering Committee Review and Decision Date: 1/21/16

Criterion 1- Apparent naturalness: The degree to which an area generally appears to be affected primarily by the forces of nature, with the imprints of man's work substantially unnoticeable.

Question 1a. What is the composition of plant and animal communities? The purpose of this question is to determine if plant and animal communities appear substantially unnatural.

Considerations for 1a:

- How are concentrations of nonnative plants and/or animals distributed across the land?
 - **Narrative:** There is one recorded population in D4_ADJ8 of salt cedar around the spring- 7 acres. There was a treatment identified for this population (mechanical and chemical) in 1998. Success of removal is unknown. Seven recorded acres out of the 245 is less than 2% but there was a discussion about whether or not the population treatment was successful. Due to New Mexico Game and Fish's (NMGF) bighorn sheep reintroduction projects in the area, team is confident that nonnative animals are not present.
- Other (Describe the dominant vegetation types, associations, and plant and animal communities. Include any additional information related to the question above)
 - **Narrative:** Area is habitat for bighorn sheep; NMGF has released bighorn sheep since the 1970s. Bighorns were recorded back by Aldo Leopold. NMGF has done 6 different releases, about 100 sheep. Areas are rocky with steep cliffs that are hard to access. All areas are sparsely vegetated. There are multiple springs in the area. Sheep are present from private on western edge and all up into the wilderness, including in the area being evaluated. Vegetation includes grass and scrub plants.

Question 1a Findings

The areas receive a **High** finding; plant and animal communities do not appear substantially unnatural (one population of 7 acres that may or may not have been removed is deemed as not substantially unnatural by the team).

Question 1b. What is the extent to which the area appears to reflect ecological conditions that would normally be associated with the area without human intervention?

Considerations for 1b:

- Vegetation restoration treatments (e.g. thinning) or timber harvest areas and distribution across the land (broadly dispersed vs. concentrated). This also includes associated railroad beds, skid trails, and logging decks of timber harvest areas
 - **Narrative:** No treatments are shown in the area, and treatments are not likely to occur due to the steep rocky terrain. Area would not carry a fire due to terrain.
- Does the vegetation appear natural (consider elements, including but not limited to vegetation species composition and structure,¹ wildlife, soil, air, etc.)?
 - **Narrative:** Area is very rocky and steep terrain. No public comment was received about the appearance of naturalness.
- Other:
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 1b Findings

The areas receive a **High** finding, due to vegetation appears natural throughout the areas.

Question 1c. What is the extent to which improvements² included in the area represent a departure from apparent naturalness?

Considerations for 1c:

- Consider the extent to which the improvements cause the appearance to depart from apparent naturalness to the area as a whole. Consider the presence and concentrations of all improvements listed below:
 - Appearance of airstrips, heliports, and/or landing zones. Include size of area and description of disturbance (soils, vegetation).
 - Appearance and concentration of linear travelways, including maintenance level 1 roads,³ system non-motorized and motorized trails, and known unauthorized routes (includes decommissioned, temporary, and user created). Consider length and spatial distribution (broadly interspersed vs. concentrated).
 - Appearance and concentration of fences and pipelines. Include miles of fencing or pipeline per square mile.

¹ Species composition is the number and proportion of species present. Structure refers to the size, density, and arrangement of plants.

² The use of the term "improvements" in this context is taken from the Forest Service Handbook, and means the evidence of past human activities in the area as a whole.

³ For a glossary of road terminology, please see the *Cibola National Forest Mountain Ranger Districts Assessment Report, Vol, II*, page 258.

- Appearance and concentrations of areas of mining activity, including exploration and prospecting, that were not eliminated in the Phase 3 inventory.⁴ Include size of area and description of disturbance (soils, vegetation).
- Appearance of range or wildlife improvements that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
- Appearance of watershed treatment areas (such as contouring, diking, channeling) that were not eliminated in the Phase 3 inventory. Include size of area and description of disturbance (soils, vegetation).
- Appearance and concentration of other improvements (including but not limited to water tanks, aviation crash locations, wreckage sites, locations of cemeteries or gravesites, bombing or ordinance locations, and watershed analysis for proposed developments)
- Other (Include any additional information related to the question above)
- **Narrative:**
- D4_ADJ6: There is a Bartollo trick tank (storage tank not deemed substantially noticeable in inventory and with no visible access route) and unauthorized route reported by landscape team member. There is a large trick tank, corral, and associated range improvements visible in aerial imagery at the end of the unauthorized route (31-1) that is still in the area; team discussed that this may be the Bartollo tank but the geospatial point may be off in location. Unnamed spring development and range fence also reported by landscape team member. There is a pipeline within the area coming from the springs; these were not determined to be substantially noticeable in the inventory phase and are small in diameter.
- D4_ADJ7: There is a trailhead for Monte Largo outside the boundary and a system trail within area. Landscape team member reports that the trail was hard to find and had little evidence of use. There are pipelines within the area coming from the springs; these were not determined to be substantially noticeable in the inventory phase and are small in diameter.
- D4_ADJ8: Portions of the cherry-stemmed road are still within D4_ADJ8 area boundaries and should have been removed. A spring/drinker associated with this road is still within the area, and should have been excluded with the 30 meter buffer. These were indicated to be removed for the Phase 3 inventory map, so should have already been excluded. There is one unauthorized route in D4_ADJ8 that is evident in aerial imagery.

Question 1c Findings

D4_ADJ6 receives a **Moderate** finding, due to improvements detracting from apparent naturalness in some areas.

D4_ADJ7 and D4_ADJ8 receive a **High** finding due to little evidence of human activity; appearance and concentrations of improvements do not detract from apparent naturalness.

Criterion 2- Outstanding opportunities for solitude or a primitive and unconfined type of recreation: **the degree to which the area has outstanding opportunities for solitude or for a primitive and unconfined type of recreation.**

Note: The word “or” means that an area only has to possess one or the other. The area does not have to possess outstanding opportunities for both elements, nor does it need to have outstanding opportunities on every acre.

Question 2a. Consider impacts that are pervasive and influence a visitor’s opportunity for solitude within the evaluated area.

⁴ See Appendix A for Substantially Noticeable criteria used in Phase 3 inventory, and Appendix B for results from the Phase 3 Inventory.

Note: Factors to consider may include topography, presence of screening, distance from impacts, degree of permanent intrusions, and pervasive sights and sounds from outside the area.

Considerations for 2a:

- Describe the general topography of the area in context of sight, sound, and screening. Can a traveler see or hear evidence of civilization from within the area? Is the area quiet and free from motorized noise?
 - **Narrative:** Areas are not very accessible; they are rocky crags and steep cliffs that are hard to access. Not much vegetation or screening, but major roadways are located far from areas' boundaries. Train whistle may be heard sometimes within the areas but is not pervasive. There are noise and impacts to solitude from military training within D4_ADJ6.
- Proximity to area of recreation developments and high use areas, private lands and associated infrastructure, non- Forest Service roads, and/or activities that impact opportunities for solitude. Consider effects of the area's adjacent, cherry-stemmed roads.⁵
 - **Narrative:** Areas are bounded on the western edges by Tome Land Grant, and adjacent to Manzano Mountain Wilderness on the eastern edges. Areas on western edge are not currently developed. There is additional special use authorization reported by Forest Service specialist for military training impacts solitude due to noise in D4_ADJ6. Landscape team members report that there may be some light pollution from major cities in region. The eastern edges are all adjacent to existing wilderness, so offer opportunities for solitude. Forest Service specialist reports that dense communities are 25 miles away from the areas. Forest Service specialist reports that there is noise and light is collected in the canyons.
- Other (Include any additional information related to the question above)
 - **Narrative:** For D4_ADJ7 and D4_ADJ8, there was not consensus from the team on a finding of low, moderate, or high; Rationale for each is as follows: Low finding due to the train tracks and civilizations seen in the distance and no screening of area; Moderate finding due to seeing civilizations of Belen in the distance, light pollution, no screening of area; and High finding due to distance of area from civilization, current data showing no developments near the area, and areas being surrounded by existing wilderness.
 - No other information provided by geospatial information, District staff and specialists, or public comment.

Question 2a Findings

D4_ADJ6 receives a **Low** finding, due to little opportunity for feeling alone and human activities or presence is unavoidable.

D4_ADJ7 and D4_ADJ8: These areas receives a **Moderate** finding, due to seeing civilizations of Belen in the distance, light pollution, no screening of area but opportunities for solitude are also possible.

Question 2b. Consider the opportunity to engage in primitive-type or unconfined recreation activities that lead to a visitor's ability to feel a part of nature.

Note: Examples of primitive-type recreation activities include observing wildlife, hiking, backpacking, horseback riding, fishing, hunting, floating, kayaking, cross-country skiing, camping, and enjoying nature. This question also

⁵ The term "cherry stemmed" road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase 1 Inventory process.

relates to miles of fence information from Criterion 1, Question 1c, due to the potential for miles of fence to restrict unconfined recreation opportunities.

Considerations for 2b:

- Describe the types of primitive recreation activities in the area.
 - **Narrative:** Hiking and backpacking occur in the area but use is not heavy. Use in area is very experienced backpackers and local hikers.
- Describe other types of recreation activities in the area.
 - **Narrative:** No non-primitive types of recreation occur due to difficulty of access.
- Percent of area with semi-primitive non-motorized recreation opportunity spectrum class.⁶
 - **Narrative:** D4_ADJ6: 100% SPNM ROS Class; D4_ADJ7: 100% SPNM ROS Class; D4_ADJ8: 100% SPNM ROS Class
- Percent of area with a semi-primitive motorized recreation opportunity spectrum class.
 - **Narrative:** D4_ADJ6: 0% SPM ROS Class; D4_ADJ7: 0% SPM ROS Class; D4_ADJ8: 0% SPM ROS Class
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 2b Findings

The areas receive a **High** finding, due to many opportunities or engaging in primitive recreation.

Criterion 3- Stand-alone area of less than 5,000 acres that is not adjacent to existing wilderness or administratively recommended wilderness: evaluate how an area less than 5,000 acres is of sufficient size to make its preservation and use in an unimpaired condition practicable.

Note: If an area on the Phase 3 Inventory maps is under 5,000 acres, it will be evaluated using the other Criteria 1, 2, 3, and 4. Therefore, there are no separate considerations for Criterion 3.

- **Narrative:** This area is adjacent to existing wilderness, so this criterion does not apply.
-

Criterion 4- Unique and outstanding qualities: the degree to which the area may contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

Note: These values are not required to be present in an area for the area to be recommended for inclusion in the National Wilderness Preservation System, but their presence should be identified and evaluated where they exist.

⁶ The Forest Service's Recreation Opportunity Spectrum (ROS) provides a framework which allows administration to manage and users to enjoy a variety of recreation environments. ROS is not a land classification system; it is a management objective, a way of describing and providing a variety of recreation opportunities. The ROS Inventory Existing Condition maps have been completed for the Forest, and the existing condition of semi-primitive non-motorized (SPNM) and semi-primitive motorized (SPM) ROS classes are being used as measures. SPNM ROS settings are areas characterized by a predominantly natural or natural-appearing environment, low interaction between users. Primitive activities occur in this setting, and include the following: viewing scenery, hiking, walking, horseback riding, camping, hunting, nature study, mountain climbing, swimming, fishing, etc. Motorized use is not permitted in SPNM ROS settings. SPM ROS class areas provide the same experience and setting as SPNM, but motorized use occurs in addition to primitive-types of recreation. Primitive ROS classes only exist on the Forest in the ROS Inventory Existing Condition within existing wilderness, so are not being used as a measure. These maps are only existing condition, and are subject to change based on desired recreation opportunity spectrum classes developed during the interdisciplinary process of Forest Plan Revision. Please refer to the Recreation Opportunity Spectrum Handbook and Primer for more information: http://www.fs.fed.us/cdt/carrying_capacity/rosfieldguide/ros_primer_and_field_guide.htm

Question 4a. Does the area contain rare plant or animal communities or rare ecosystems?

Note: Rare in this context is defined as local or regional.

Considerations for 4a:

- Presence of threatened, endangered, or rare species (from Natural Heritage database and other data sets as available).
 - **Narrative:** The bighorn sheep population is a proposed species of conservation concern, but not determined to be rare for the region. No other species populations are shown in geospatial data.
- Other (include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4a Findings

The areas receive a **Low** finding, due to no populations of threatened, endangered, or rare species in the areas.

Question 4b. Are there any outstanding landscape features such as waterfalls, mountains, viewpoints, waterbodies, or geologic features?

Considerations for 4b:

- Description of any unique geologic features in the area.
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.
- Presence of outstanding scenic features within the area or percent of area with distinctive scenic attractiveness class.⁷
 - **Narrative:** D4_ADJ6: 100% Distinctive Scenic Attractiveness class; D4_ADJ7: 100% Distinctive Scenic Attractiveness class; D4_ADJ8: 100% Distinctive Scenic Attractiveness class. Landscape team reports it is a very scenic area due to the rocky outcroppings and viewsheds.
- Other (include any additional information related to the question above):
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4b Findings

The areas receive a **Low** finding, areas are scenic but contain few outstanding landscape features.

Question 4c. Are there historic and cultural resource sites in the area?

⁷ The Forest Service's Scenery Management System (SMS) provides the framework to effectively inventory, assess, and manage scenic resources. Scenic Attractiveness is a component of the SMS inventory, and is the primary indicator of the intrinsic scenic beauty based on commonly held perceptions of preferred scenery and landscape features. The three scenic attractiveness classes are: Class A-distinctive; Class B-typical; Class C-indistinctive. To determine these classes, the landscape elements of landform, vegetation, rocks, cultural features and water features are mapped using General Terrestrial Ecosystem Survey (GTES) information for the Forest, with District personnel input on areas of the Forest that were not picked up at the GTES scale. The Scenic Attractiveness map is based largely on existing landscape features. Refer to the Forest Service Scenery Management Handbook for more information: http://www.fs.fed.us/cdt/carrying_capacity/landscape_aesthetics_handbook_701_no_append.pdf

Considerations for 4c:

- Presence of structures, dwellings, and other relics of past occupation when they are considered part of the historical and cultural landscape of the area. Also consider potential historical railroad beds/berms associated with timber harvest areas from Criterion 1, Question 1b.
 - **Narrative:** D4_ADJ6: Forest Service archaeologist reports a finding of Low, percent surveyed 19.6%; D4_ADJ7: Forest Service archaeologist reports a finding of Low, percent surveyed 17.7%; D4_ADJ8: Forest Service archaeologist reports a finding of Low, percent surveyed 10.0%.
 - D4_ADJ6 contains a special use authorization by NRHP to identify historic properties on Cibola National Forest for eligibility recommendations
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Note: (Confidentiality requirements with respect to cultural resource sites must be respected (25 U.S.C 3056)).

Question 4c Findings

Based on information that could be shared in the geospatial information, areas receives a **Low** finding due to presence of some historic and cultural resource sites.

Question 4d. Are there any research natural areas?

Considerations for 4d:

- Percent of area that is part of a research natural area.
 - **Narrative:** 0%
- Other (Include any additional information related to the question above)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4d Findings

The areas receive a **Low** finding, due to no research natural areas in the area.

Question 4e. Are there any high quality water resources or important watershed features?

Considerations for 4e:

- Presence and extent of high quality water resources in the area.
 - **Narrative:** D4_ADJ6 contains one spring in the area. D4-ADJ8 has one spring that is still within the area but should have been excluded in inventory due to substantially noticeable inventory finding.
- Other (Include any additional information related to the question above, including whether the water resource meets state water quality standards)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 4e Findings

The areas receive a **Low** finding, due to few to no high quality water resources in area.

Criterion 5- Management: the degree to which the area may be managed to preserve its wilderness characteristics.

Question 5a. Can the area be managed to preserve its wilderness characteristics?

Considerations for 5a:

- Presence and extent of legally established rights or uses within the area. (e.g. active mining claims, grazing allotments, easements, water rights, acequias)
 - **Narrative:** The Monte Large Comanche grazing allotments overlap all three areas, and there are some improvements. D4_ADJ6 contains a large tricktank with an unauthorized road and corrals. D4_ADJ8 geospatial data shows a right of way access in the area, but this appears to be in the wrong place and refers to the cherry-stemmed route.
- Presence and extent of any specific Federal or State laws that may be relevant to availability of the area for wilderness or the ability to manage the area to protect wilderness characteristics (including but not limited to designated or proposed critical habitat).
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.
- Presence and extent of non-Federal land and access in the area⁸
 - **Narrative:** For D4_ADJ6 and D4_ADJ8, the only current permitted access into these areas is from the existing wilderness.
- Describe management of adjacent lands.
 - **Narrative:** The areas on western edge (Tierra Grande or Tome Land Grant) are subdivided plots that are not currently developed. The entire eastern edge of the areas is existing wilderness.
- Describe presence and extent of cultural and traditional uses of the area (e.g. shrines, ceremonial use, etc.)
 - **Narrative:** There is cultural and traditional use. Managing for wilderness character would not conflict with cultural and traditional use.
- Presence and extent of wildland urban interface in the area. Include acres if possible.
 - **Narrative:** D4_ADJ6: 0% wildland urban interface; D4_ADJ7: 0% wildland urban interface; D4_ADJ8: 0% wildland urban interface. Landscape team member reports this is accurate due to lack of structures and lack of tree stands. Landscape team member reports that the rocky terrain does not lend itself to fire.
- Describe any other management activities or restrictions within in the area (e.g. upcoming management decisions).
 - **Narrative:** Past bighorn sheep management by the state was not in conflict with wilderness character. There are not currently any active projects for sheep management other than population monitoring which is not in conflict with managing for wilderness character.
- Describe existence and extent of motorized and mechanized uses within the area (trails, routes, special activities).

⁸ This consideration, in addition to “Describe management of adjacent lands” and “Presence and extent of ‘cherry stemmed’ roads or other linear features” informs the consideration of shape and configuration as outlined in FSH 1909.12 Chapter 70.

- **Narrative:** D4_ADJ6 contains mechanized use from military training. Unauthorized route leading to truck tank improvements may indicate motorized maintenance. Some maintenance may occur to pipelines in other areas. No other information provided by geospatial information, District staff and specialists, or public comment.
- Presence and extent of special use permits and authorizations within the area.
 - **Narrative:** In D4_ADJ6: There is a special use permit by NRHP to identify historic properties on Cibola National Forest for eligibility recommendations. Also in D4_ADJ6: there is additional special use authorization reported by Forest Service specialist for military training.
- Presence and extent of “cherry stemmed”⁹ roads or other linear features.
 - **Narrative:** There is one small cherry stemmed road in D4_ADJ8.
- Other (Include presence of Inventoried Roadless Areas and any additional information related to the question above.)
 - **Narrative:** No information provided by geospatial information, District staff and specialists, or public comment.

Question 5a Findings

D4_ADJ6 receives a **Low** finding due to presence and extent of other uses occurs across most of the area and makes management to preserve the areas wilderness characteristics low in most areas (special uses- military training, range allotment improvements, and access route).

D4_ADJ7 receives a **High** finding; the presence and extent of other uses management activities occurs in isolated spots and makes management to preserve the area’s wilderness characteristic high throughout the area (remotely accessed either by existing wilderness or one trailhead, no other uses or activities restricting management)

D4_ADJ8 receives a **High** finding; the presence and extent of other uses management activities occurs in isolated spots and makes management to preserve the area’s wilderness characteristic high throughout the area (remotely accessed either by existing wilderness or one trailhead, no other uses or activities restricting management)

IDT Findings and Preferred Proposal Discussion (How should this area be managed? Include any

suggested alternatives 12/11/16: D4_ADJ6: Finding: The team finds that D4_ADJ6 with its current boundaries does not have wilderness characteristics due to the impacts from special use authorizations and other permitted activities in area. **Preferred proposal:** Continue to manage as it is currently being managed. No changes or additional management objectives suggested. D4_ADJ7: Finding: The team finds that D4_ADJ7 as a whole does have wilderness character. **Preferred proposal:** Manage a portion as a wilderness gateway/portal because the trailhead and road leading to this area are the only access points into the existing wilderness and the rest as wilderness, with continued occurrence of permitted activities. **Alternative:** no change to current management. D4_ADJ8: Finding: The team finds that D4_ADJ8 as a whole does have wilderness character. **Preferred proposal:** Manage area as wilderness, after removing area that was supposed to be excluded in inventory (based on a finding of substantially noticeable improvements adjacent to cherry-stemmed road), with continued occurrence of permitted activities. **Alternative:** no change to current management.

⁹ The term “cherry stemmed” road refers to a road removed from the inventory using the 30 meter (98.4 feet) road buffer screening from the Phase I Inventory process.

Steering Committee Decision, 1/21/16:

D4_ADJ6

Finding: D4_ADJ6 with its current boundaries does not have wilderness characteristics due to the impacts from special use authorizations and other permitted activities in area.

Preferred proposal: Continue to manage as it is currently being managed. No changes or additional management objectives suggested.

D4_ADJ7

Finding: D4_ADJ7 as a whole does have wilderness character.

Preferred proposal: Manage a portion as a wilderness gateway/portal because the trailhead and road leading to this area are the only access points into the existing wilderness and the rest as wilderness, with continued occurrence of permitted activities.

Other alternative: no change to current management.

D4_ADJ8

Finding: The team finds that D4_ADJ8 as a whole does have wilderness character.

Preferred proposal: Manage area as wilderness, after removing area that was supposed to be excluded in inventory (based on a finding of substantially noticeable improvements adjacent to cherry-stemmed road), with continued occurrence of permitted activities.

Other alternative: no change to current management.

Wilderness Evaluation Findings and Summary Table

Area ID:		D4_ADJ6 IDT Findings 12/10/15	D4_ADJ6 STC Decision 1/21/16	D4_ADJ7 IDT Findings 12/10/15	D4_ADJ7 STC Decision 1/21/16	D4_ADJ8 IDT Findings 12/10/15	D4_ADJ8 STC Decision 1/21/16
Criterion Question *	1a	High	High	High	High	High	High
	1b	High	High	High	High	High	High
	1c	Moderate	Moderate	High	High	High	High
	2a	Low	Low	Low, Moderate, High	Moderate	Moderate	Moderate
	2b	High	High	High	High	High	High
	3	N/A	N/A	N/A	N/A	N/A	N/A
	4a	Low	Low	Low	Low	Low	Low
	4b	Low	Low	Low	Low	Low	Low
	4c	Low	Low	Low	Low	Low	Low
	4d	Low	Low	Low	Low	Low	Low
	4e	Low	Low	Low	Low	Low	Low
	5a	Low	Low	High	High	High	High

Summary	Required: 3H, 1M, 2L Supplemental: 4L	Required: 3H, 1M, 2L Supplemental: : 4L	Required: 5H, 1H/M/L Supplemental: 4L	Required: 5H, 1M Supplemental: 4L	Required: 5H, 1M Supplemental: 4L	Required: 5H, 1M Supplemental: 4L
Evaluation Finding	No	No	Yes	Yes	Yes	Yes
Preferred Proposal	No change to current management	No change to current management	Manage portion as wilderness portal, recommend remainder as potential wilderness with continued permitted activities	Manage portion as wilderness portal, recommend remainder as potential wilderness with continued permitted activities	Recommend area as potential wilderness with continued permitted activities	Recommend area as potential wilderness with continued permitted activities
Alternatives for Area	No change to current management	No change to current management	No change to current management	No change to current management	No change to current management	No change to current management

* Required criteria are bold—Criterion 1: Apparent Naturalness, Criterion 2: Opportunities for Solitude or Primitive Type of Recreation, and Criterion 3: Manageability. Criterion 3: Areas under 5,000 acres does not have separate considerations, and is evaluated using the other criteria. Criterion 4: Unique and outstanding values is an optional/supplemental criteria that is not required to be present in an area.

Steering Committee Review Notes and Decisions, 1/21/2016:

STC concurred on all findings and decided on a finding of Moderate for 2a for ADJ7 and ADJ8.